

The Economics of Elementary Education in India

The Challenge of Public Finance,
Private Provision and Household Costs



Editor
Santosh Mehrotra

The Economics of Elementary Education in India

This collection ... fills an important gap in the literature on elementary education in India. Elementary education is a fundamental right under the Indian Constitution, but most Indian states have a long way to go in ensuring universal elementary education. The crisis of state finances threatens to delay the realization of this crucial goal. In this context it is imperative to learn from the comparative experiences of different states, which are highly diverse, and to explore financing options in detail. The book makes excellent use of this comparative perspective and presents many insightful findings on the financing aspects of elementary education in India.

Jean Dreze
Honorary Professor of Economics, Delhi School of Economics

This collection, edited by Santosh Mehrotra, pulls no punches Mehrotra and his colleagues judge that India is very far from being the tiger economy which it likes to project itself as...this book will be a timely reminder that India, despite its undoubted scientific and technological prowess, and its high level manpower, is not on track to meet the target of free, compulsory, good quality education for all its young people.

Kenneth King, Professor of International and Comparative Education,
University of Edinburgh

An extremely interesting and timely book... It is unusual to have a comparative diagnosis among among Indian states carried out in such a systematic and rigorous way, using data from a survey of this magnitude. It is quite remarkable that historical dimensions are combined with a thorough analysis both of data on perceptions, and hard facts on the development of the sector. I am impressed by the effort made to articulate dimensions usually covered by the literature (such as access, quality, effectiveness), with more 'intangible dimensions' such as accountability and participation. The overall impression is that there are both positive and less satisfactory performance of education policies during the past decade. The efforts made to assess the prospects (both costs and financial) are most welcome. Overall this book will be an excellent references for researchers, education managers and policy-makers, not only in India but elsewhere. Indeed the Indian experience offers relevant examples of '*what works,? When? And under what conditions?*', at the same time it does warn the reader against too simplified and superficial strategies to address the challenges of EFA.

Jacques Hallak, Education Economist and Former Director
of the UNESCO International Institute for Educational Planning, Paris

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The Challenge of Public Finance, Private
Provision and Household Costs

Editor

SANTOSH MEHROTRA



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To all the children of India
who deserve much better
(and Sushma and Pia)

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Preface

This book is the product of a research project examining key aspects of the elementary education system, focusing especially on aspects of cost and financing, in the large educationally-backward states of India. The surveys on which it is based were carried out in 2000 on the basis of representative samples in each of the selected states.

Today, India has a population of illiterates that is larger than the country's total population in 1947 during independence. There cannot be a greater testimony to how we have failed our children. Of all the large so-called emerging market economies—Brazil, China, Argentina, Mexico, Indonesia, South Africa—India has among the lowest health indicators and the worst educational indicators. Yet, the Indian state has always trumpeted the fact of India 'having the third largest scientific and technical cadre in the world'. It is indeed an irony lost on no one that the sixth nuclear power in the world, India, has educational indicators for a majority of its population in the most backward states which are not different from those of an average Sub-Saharan country. These educationally-backward states are the ones that account for most of the country's children out of school, and most of its illiterate population. Since higher educational levels are known to be highly correlated with better health indicators, and also with income levels, these states are the ones with the highest incidence of poverty among Indian states. Poor educational outcomes in these states reproduce poverty in a cycle from generation to generation.

Leading scholars in educational finance in India were involved in analysing the data emerging from the surveys in Assam, Andhra Pradesh, Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, West Bengal—states that account for three-fourths of the country's children out of school. We are grateful to New Concept Information Services for conducting the survey on behalf of the team of scholars. We are all also grateful to Unicef India for financing the study,

and to Dr Ranjana Srivastava, who most generously gave her time to help coordinate the study. Without her constant guidance, the research project could not have been completed.

I conceived of this set of studies in the late 1990s, and designed the terms of reference for them, while I was Economic Adviser, Unicef, New York, and later went on to supervise the work after I became joint head of research at Unicef's international research institute, the Innocenti Research Centre, Florence, Italy. Many senior members of the Ministry of Human Resource Development, Government of India helped in the conceptualisation and initiation of the study: Dr Vaidyanathan Ayyar, Mr Abhimanyu Singh, Mr Sumit Bose and Mr Amarjit Sinha; Ms Vrinda Sarup enabled us to publish the study. We are grateful to them. I would also like to acknowledge with thanks the support of a series of Unicef Education Chiefs in India who supported the research project over its long life: Dr David Harding, Ms Carrie Auer, Ms Suzanne Allman and Ms Chetana Kohli. The intellectual encouragement for the study that came from Ms Mehr Khan and Ms Marta Santos Pais is also gratefully acknowledged. Carolina Viscaino was a very conscientious research assistant.

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The views expressed herein, however, are those of the authors, and should not be ascribed to the organisations with which they may be associated.

Santosh Mehrotra

1 What Ails the Educationally Backward States? The Challenges of Public Finance, Private Provision and Household Costs

SANTOSH MEHROTRA*

The beginning of the state system of education in India dates back to the year 1813 under British rule, when the East India Company accepted responsibility for education of India through a Charter Act. Missionaries started their first schools in the 1820s. Local language schools also began at that time. Although India was still ruled by the East India Company (rather than by the British government directly),¹ it was at this time that Lord Macaulay (in his 'Minutes' to the British Government) in 1835 advocated English education on Western lines for Indians. The priorities in Indian education were determined, from that time on, by the need, as determined by Macaulay, for a class of English-educated Indians who could 'be interpreters between us and the millions whom we govern'.² Leading Indian social reformers like Raja Ram Mohan Roy supported this move. A debate on 'oriental' versus 'occidental' education arose. Finally, in 1854 Sir Charles Wood sent his despatch to the British government settling the debate in favour of English education in India. India still continues to suffer the consequences of that decision. While on the one hand it led to the introduction of what has since become a major language of international discourse—English—into Indian education, it also had the far more damaging consequence of segmenting the Indian education system

* I am grateful to Tapas Majumdar, Geeta Kingdon and an anonymous reviewer for comments on an earlier draft.

into those who received an 'English' education, and those who did not. Since then the former have ruled, and the latter were ruled.

This was a segmentation that was superimposed upon an already inequitable system. In the princely states under the British Raj, schooling tended to be confined to the upper castes and the relatively well-off. In addition to some state action, schooling during the Raj did spread a little due to a combination of three factors: philanthropy, nationalism and social reform. There were indeed efforts by private charitable trusts. For example, trading communities, such as the Marwaris in Rajasthan, assisted in the opening of private schools for rural children. Social movements, like the Arya Samaj, also contributed to the spread of schooling. In any case, the coverage was so limited that it was inevitable that education was confined to a minuscule minority of the population of the country.³

India had had a long history of organised education prior to the British rule. The *gurukul* system of education is one of the oldest on earth, and was dedicated to the highest ideals of all-round human development: physical, mental and spiritual. Gurukuls were traditional Hindu residential schools of learning: typically the teacher's house or a monastery. Education was free, but students from well-to-do families payed *gurudakshina*, a voluntary contribution after the completion of their studies. At the Gurukuls, the teacher imparted knowledge of religion, scriptures, philosophy, literature, warfare, statecraft, medicine and astrology. The first millennium and the few centuries preceding it also saw the flourishing of higher education at the Nalanda, Takshila, Ujjain, and Vikramshila Universities.⁴

British records show that education was widespread in the 18th century, with a school for every temple, mosque or village in most regions of the country. The schools were attended by students from all classes of society. The current system of education, with its western style and content, was introduced, as noted earlier, following recommendations by Macaulay. Traditional structures were not recognised by the British government and have been on the decline since. In any case, collectors' records suggest that indigenous education was mostly limited to the 'twice-born' among the Hindus till the early 19th century, although other castes did attend.

We should also note that among European countries, England was one of the last to develop a state system of education—which had its own consequences for schooling in British India. It was not until 1881 that the British state adopted a policy of mass education for the English people provided largely by the state—much after the idea had become a norm in then Prussia (now Germany), Holland, France or northern USA (Green, 1990; Stephens, 1998). Those countries which left it to the private sector to develop its education system (for example England, southern USA) took much longer for education to become universal and compulsory; in fact, it did not happen until the state actually intervened and undertook to develop a state-financed school system.

The Hunter Commission of 1882 recommended mass education in India. However, the efforts of the British Raj did not have much effect. At independence in 1947, enrolments in elementary schools were 40 per cent of the target population, and the literacy rate was 16 per cent. At the time of the first Census of India in 1901 the literacy rate was around 5 per cent, and barely rose to about 10 per cent at the time of Census 1941. Literacy was merely 18.3 per cent in 1951, at the first census after independence.

Over half a century after independence from colonial rule, over a third of the nation is still illiterate. This is despite the fact that the Indian Constitution had promised in 1950 that free elementary education would be available to all within a decade. 'The State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years' (Art. 45, Directive Principles of State Policy). Although academic economists and the media are often full of unfavourable comparisons of Indian economic growth with the economic miracle of China and the East Asian States, rarely is the comparison made with the fact that China had achieved India's literacy rate of 2001 (65 per cent) two decades earlier, and the east Asian countries even earlier.

However, it is also a fact that not all Indian states are a source of the malaise with the Indian education system. The states that have held India's average educational indicators down are a small number of large and populous states, almost entirely occupying a swathe of territory in north India, stretching from west to east. It is the elementary education system in these states that is the

focus of this book. The study was based on surveys in each state carried out over the academic year 1999–2000.

Over half a century after independence, literacy in India was still only 65 per cent according to Census 2001, and over 40 million children in the age group 6–11 were out of school (or over two-fifths of the world's children out of school) at the turn of 21st century. This book examines six states, which account for nearly three-fourths of the children out of school in India (Bihar, Rajasthan, Madhya Pradesh (MP), Uttar Pradesh (UP), Assam, West Bengal (WB)), and one relative high-achiever state, Tamil Nadu (TN). The usual choice in the past for a high-achiever state has always been Kerala (see for example Drèze and Sen, 1989; Mehrotra and Jolly, 1997). We deliberately chose TN because it has made remarkable progress compared to the northern states not only in areas of literacy and schooling, but also nutrition, health services and fertility reduction. While Kerala has been, to some extent, 'overstudied', less attention has gone to TN whose achievements are comparatively more recent, and very, if not equally, remarkable.

The National Family Health Survey (NFHS) II (Government of India 1998–99) showed that the median number of years of schooling in India was 5.5 years at the end of the 20th century. Among the states examined in this book, all (except TN) have years of schooling that are below the national average: Bihar has the lowest at 3.5; Assam and WB, 4.5; MP and AP, 4.7; UP and Rajasthan have the highest mean years of schooling in this group, 4.8. In any case, all are below five years. In contrast, the rest of Indian states are all at or above five years of schooling. Most of the major states of the country that have over six years of schooling are in the south or west of the country: Kerala (8), Maharashtra (7.1), followed by Punjab, Gujarat, Haryana and Karnataka (in that order).

This great north–south divide (whose uniformity in the north is disturbed only by the better-performing contiguous states of Himachal Pradesh, Punjab and Haryana) is also reflected in a number of other social indicators: infant mortality rates are much lower than the national average (66 according to NFHS II 1998–99) in TN (49), Kerala and Karnataka, indicating that health status is also better. Similarly, total fertility rates are much lower in the same group of three southern states where median years of schooling are the highest in the country. Thus in TN and Kerala—both with total fertility rates equal to the replacement level of 2—the number

of children in primary schools has actually begun to decline, thus creating the space for these states to work on improving quality of schooling in the future. This is a development quite similar to what the East Asian tigers experienced in the early years of development: rising levels of education in the population along with improving child survival rates led to falling birth rates and population growth rates, thus leading to falling numbers of children in primary school. Not surprisingly, these better social indicators are reflected in the lower incidence of poverty in the southern states by and large.⁵ This is the first study of its kind which was implicitly driven by the fact of this north–south divide in the education sector.

The failure of the promise of literacy in what have come to be known as the ‘Bimaru’⁶ states has had profound consequences, which will blight human development in the country for generations, because it has delayed the demographic transition. Higher literacy is associated with lower fertility. China managed to reduce its illiteracy rate, and thus its fertility rate, along with its child mortality rate early in its development process. Its population, though larger than India’s now, will stabilise at a lower level than that of India in the second quarter of the 21st century. Meanwhile, India already has a larger illiterate population than its total population was in 1947. And as expected, the four states with the worst record on elementary schooling and literacy in India—UP, Bihar, Rajasthan and MP—will, by 2016, account for nearly half the country’s population. The five states of Bihar, MP, Orissa, Rajasthan and UP that at the end of the 1990s constituted nearly 44 per cent of the total population, are projected to comprise 48 per cent of the total population in 2016 (Planning Commission, 2000). These states alone will contribute an anticipated 55 per cent to the increase in the country’s population during the period 1996–2016. Demographic outcomes in these states will determine the timing and size of population at which India achieves population stabilisation. Since these phenomena will affect the human development of half of the country’s population, the educationally backward states of India are the focus of this book.

This chapter is divided into three sections. Section 1 examines the value added by this study, and explains why it was undertaken in the light of recent research work. Section 2 dwells on the comparative findings for all the states under study. It also examines the progress made in each of the states under study here—briefly,

so as to spell out the specific features of developments and challenges in each of the states. Section 3 concludes. Appendix 1A-1 spells out the methodology of the survey that is the basis of the state-level chapters.⁷

1. THE NEED FOR SUCH A STUDY

There was a considerable increase in academic attention given to elementary education in the 1990s (PROBE, 1999; Vaidyanathan and Nair, 2001; Govinda, 2002). However, the present volume is the first study of its kind that focuses mainly on the cost and financing aspects of elementary education. It is also the first major study of elementary education in India covering most of the major states based on a representative sample since the National Sample Survey of 1995–96.⁸ It also covers a much larger number of states than the PROBE (Public Report on Basic Education) study (which focused on four states). The importance of surveys in giving the country's scholars and policy-makers a true picture of the realities of the school system in India cannot be overstated, since it has long been known that the administrative records in India are unreliable as a source of data on enrolment, dropout, retention and repetition—given the inherent incentives to overreport on favourable and underreport on unfavourable aspects and indicators (Drèze and Kingdom, 1998).

However, the objective of the survey was not to generate new information regarding outcome indicators on elementary education (for example enrolment and completion rates)—although the survey did do that; nor was it to examine the inter-district spatial disparities within each state—which the survey does not do and could not have done.⁹ The survey does, however, present information about spatial disparities in terms of rural–urban differentials in outcome indicators within each state.

The value addition of the book derives essentially from the fact that it focuses on issues of cost and financing of elementary education. As far as we are aware, there is no detailed analysis on a state-by-state basis of the financing issues addressed here. Tilak (2000)¹⁰ has done a useful comprehensive analysis of public spending in India, but does not address the issue state by state. Similarly, Bashir (2000) and Sipahimalani (2000) do an excellent analysis of the public expenditure on elementary education in the 1990s, and

indeed devote a section to state-level expenditure.¹¹ However, the analysis in the chapters in this book naturally goes into the issues at greater length statewise.¹²

The Unicef survey (1999/2000) on which the present book is based collected data on government schools and also private ones, both government-aided as well as unaided ones. In fact, this is the first major survey to provide data on private schooling since two surveys in the mid-1990s: the PROBE survey (collected data in 1996) and the National Sample Survey (NSS) 52nd Round (of 1995–96),¹³ which also provided data on private schools.¹⁴

Another aspect of financing for which the Unicef survey provides data is household expenditure on schooling. In this respect too this database is the first generated since the PROBE and NSS 52nd Round data.

In other words, the data analysed in this book covers both aspects of financing and provision: public provision and financing, and private provisioning as well as private out-of-pocket costs of the household. There is no other recent study that we are aware of that covers all these aspects of elementary education in the major states of India.

While the focus in the survey was on issues concerning the cost and financing of elementary education, a fundamental objective is to establish how household and school-related factors affect the demand for education, and how the pattern of financing determines, and can be changed to address, the school-related factors underlying the relatively low demand for education in many states. Quite clearly, pedagogical problems cannot be separated from issues of financing as reasons of poor student outcomes. Also, addressing cost or finance-related issues will not resolve all the school-related problems that underlie low enrolments and high dropouts. Hence, the survey collected information that enable the authors to analyse recent changes in access, quality and retention in elementary schools.

Thus, each of the chapters in this book examines the following issues for the selected state, based mainly on the Unicef survey: the enrolment and quality of government elementary education; the private sector schools, and how they compare in terms of various indicators with government schools; the public expenditure pattern; and household expenditure on schooling. Each chapter

also examines the recent initiatives of the state government in the state, and finally discusses the potential for additional reforms.

2. FINDINGS

The surveys found that there has been good progress in enrolment since the completion of the National Sample Survey Organisation (NSSO) education survey in 1995–96. In this respect it confirms the findings of the NFHS II (1998) and Census 2001. This is partly a response to the introduction of a number of incentives to increase parental demand for education and partly the increase in public expenditures on elementary education by the centre—significantly funded out of external resources¹⁵—but also a number of state-specific initiatives (as we discuss below).

Enrolment and Quality

There have been significant efforts to initiate reforms in the three crucial areas of elementary education, namely access, retention and learning quality. Progress is remarkable in the economically backward states of Bihar, MP, Rajasthan and UP which historically were characterised by low enrolment levels. This increase in enrolment has also narrowed the rural–urban divide that had been characteristic of Indian elementary education until the early 1990s. However, in rural areas, still between one-fifth and one-third of all girls in several states (Bihar, MP, Rajasthan, UP) have never been enrolled in government schools. States like Bihar and UP have a high incidence of *never-enrolled* children even in urban areas, indicating that the problem of non-enrolment has not been completely eliminated even there.

Unlike the progress in enrolment during the last two decades, the trends in retention and quality are not very encouraging. More children are *dropping out* of schools in both rural and urban areas, particularly at the upper primary level. That is, older children are not remaining in school. Analysis by states shows that the problem of dropouts is particularly high in the rural areas of four states: AP, Assam, Rajasthan, and even the educationally-advanced state of TN. In urban areas, Bihar (for boys), MP (for girls) and WB (for both boys and girls) have relatively higher proportions of dropouts.

Children who dropped out or never enrolled are the ones out of school. There is still a high incidence of *out-of-school children* for the 6–13 age group. Nearly a fifth of children from the younger age group (6–10 years old) in all states are out of school in rural areas, while this is the case for nearly a tenth in urban areas.

Another worrying indicator is the *lower Net Enrolment Ratio (NER) compared with the Gross Enrolment Ratio (GER)* that indicates a high incidence of repetition, high proportion of over- and under-age children admitted into various grades, and low real participation of stage-specific age groups. The repetition rate at the primary stage is much higher for rural areas than for urban, particularly in AP, Assam, Bihar and Rajasthan.¹⁶ At the upper primary stage, the repetition rate problem is spread across all the states and is as high as 40 per cent in rural TN and urban MP. While the incidence is high for almost all states in rural areas, for urban areas it is relatively high in three states (Assam, Rajasthan and MP), ranging between 20 and 40 per cent.

While comparing progress between the NSSO survey of 1995–96 and the Unicef survey of 1999 what hits home repeatedly (see chapters 2 to 5) is that girls, and Scheduled Caste and Tribe (SC/ST) children are the ones being left behind—especially in rural areas. Bihar (chapter 3) and UP (chapter 2) are particularly prone to exclusion on caste grounds, but also West Bengal.¹⁷ Regardless of the progress in enrolment for all categories of children, there is often a triple burden borne by certain groups of children: if you are a girl, plus if you are a Dalit, plus if you live in rural areas, the likelihood of your being never-enrolled and of dropping out early is greater. And this is more likely if you live in Bihar, UP, Rajasthan or MP. These results of the Unicef survey are confirmed by the results of Census 2001: while the urban male literacy rate in India is a respectable 86.4 per cent, and the urban female rate is 73 per cent, the rural female literacy rate is 46.6 per cent on average. But India's most populous states have, despite the progress in enrolment in elementary schools, much worse rates for female literacy: Bihar, 30 per cent; UP, 37.7 per cent; Rajasthan, 37.7 per cent; and MP, 43 per cent. This pattern of severe gender (and caste) disadvantage continues to mark the rural areas of these Hindi-belt states (chapters 2 to 5).

The expansion of *schooling facilities within a reachable distance* and teacher supply are insufficient and incapable of meeting the

growing demand for education. A large portion of the population, especially backward caste groups, is not served by schools within a reasonable distance. While 90 per cent of the population in rural areas might have gained access to schooling, nearly 10 to 15 per cent of the SC/ST groups in rural areas are still deprived of schools (given that in many states they continue to live in segregated hamlets). Moreover, the proportion of population from backward caste groups not served within the habitation exceeds 50 per cent in states such as MP and UP. The lack of upper primary schooling facilities is even more dramatic, with one-fourth to one-half of the STs without a school within the habitation. Among the seven states the number of villages without schools ranges from 2,000 in TN to more than 39,000 in UP.

Similarly, the expansion of teachers has been limited in comparison with the number of students. Slow growth in teacher supply has resulted in overcrowded classrooms. Overcrowding in schools is inevitable if primary pupil-teacher ratios are as high as 63 in Bihar and 52 in WB. With the exception of Assam and TN, the ratio remains above the national norm of 1:40. The pupil-teacher ratio in rural schools remains far worse than those in urban areas (for example 67 in rural UP compared to 30–35 in urban UP).¹⁸ Regular posts for teachers remain unfilled, since the state is not in a fiscal position to hire additional teachers. When you combine this phenomenon with the scale of teacher absenteeism, the magnitude of the problems facing parents who wish their children to learn becomes clear.

The limited expansion is also evident in the large number of single-teacher schools. At the primary level, the highest proportion of single teacher schools existed in MP (22 per cent), followed by Bihar (16 per cent), and UP (12 per cent). Of all the seven states examined here, WB had the highest proportion of three/more than three-teacher schools (79 per cent), according to the Unicef survey. The highest proportion of one or two-teacher schools were in Bihar (66 per cent), UP (65 per cent), and MP (60 per cent). Clearly, the picture emerging for the educationally backward states of India from our survey is by no means pretty.

It may be easier to understand this situation in historical perspective—given what the country had inherited from the British Raj. Between 1950 and the mid-1980s there was a steady expansion of the school infrastructure. It was only by 1986, the year of the

5th All-India Educational Survey of National Council of Educational Research and Training (NCERT) that a school could be provided in most of the 587,000 villages of the country. But in 40 per cent of the cases, a school represented a teacher teaching Classes 1–5 in one classroom. It is only with the adoption of the National Policy on Education in 1986 that the number of teachers began to grow in strength under the banner of Operation Blackboard (OB) (Seetharamu, 2002). OB comprised three strategies, one of which was to provide an additional teacher, preferably a woman, to every single-teacher school, but the evidence suggests that rather limited headway has been made in eliminating single-teacher schools. This is the outcome, as we argue, of a pattern of public expenditure in education that could not rise to the historical challenge. As we noted earlier, a country with a larger population—China—that became independent of foreign dominance two years later than India, had attained a literacy rate of 65 per cent in 1980.

Teaching quality remains a problem and has a negative impact on children's performance. The mean achievement level of students in language and mathematics has improved but is still far from satisfactory particularly in the higher grades of primary schooling (Bashir and Ayyar, 2001).

Historically, teacher absenteeism from school has been seen to be a major problem in India. In fact, Kremer et al. (2004), in a recent survey for the World Bank of 20 states in India using a representative sample, came to the conclusion that the teacher absence rate in India on average is 25 per cent—the highest rate in a sample of eight countries studied (except Uganda, where it was 27 per cent).¹⁹ It is interesting that the states that have better elementary education indicators have a lower incidence of teacher absences—with high-achiever states like Kerala, TN and Himachal Pradesh (HP) having the lowest absence rate, and UP, Bihar, Chhattisgarh, Jharkhand, and Assam with higher than national average rates.²⁰ Even for teachers who were present on the days of spot-check (during the survey), 41 per cent in the best performing state (Maharashtra) and 81 per cent of teachers in the worst one (Jharkhand) were engaged in non-teaching activity. States with higher absence rates also tended to have lower probabilities of teaching activity conditional on attendance.²¹ In other words, the Kremer et al. survey paints a dismal picture, just as our own survey results do.

Teacher accountability is still ensured along vertical lines of control through a system of supervision by the inspector of schools. The inspector is rarely able to visit schools, and hence absenteeism goes unpunished. The system of Village Education Committees (VECs) barely functions, and Parent Teacher Associations (PTAs), if they exist, rarely meet.²² Only a system of deep democratic decentralization, with 'voice' expressed by active Village Education Committees (VECs) and PTAs is likely to make teachers accountable to the parents and the community, rather than to the bureaucrats above them who grant their leave and sanction their salaries.²³ In fact, it is remarkable that one of the educationally backward states, MP, has among the lowest teacher absence rates (17.6 per cent), compared to the national average of 25 per cent). This is also one of the states that has gone furthest in promoting depth in its democratic decentralization, by activating the voice of the people (see later, as well as Chapter 5). By contrast, Bihar, which did not even deign to hold the first elections to its panchayati raj institutions until 2001—the last state to do so—has among the worst absence rates (37.8 per cent, with 73.6 per cent of teachers present found engaged in non-teaching activities). The same applies to Jharkhand, which was part of Bihar till August 2000.

Progress in the States

It was noted earlier that the selected states examined in this book account for nearly three-fourths of the children out of school in the country as a whole. While most of the book is devoted to these backward states that act as a millstone around the educational indicators of the entire country, there is one state that has made remarkable progress in elementary education: Tamil Nadu. Like Kerala before it, it has remained a beacon of light for the rest of the country.

Several factors account for the fact that in elementary education, Tamil Nadu is a high-achiever, relative to other Indian states—and in particular compared to the rest of the states in this study. First, unlike the other states in this study, the literacy rate in TN's (or Madras state, as it was then called) at the time of the first census (1951) after independence (1947) was slightly higher than the national average literacy rate (around 18 per cent); for all other states under consideration here the literacy rate was lower than

the national average at the time of independence. Some historical factors accounted for the situation in what was then Madras state.²⁴ There was a major shift in the education policy of the Madras Presidency Government from 1910 onwards. Spurred by the national movement under leaders like G.K. Gokhale, the Government of India agreed to subsidise the opening of elementary schools in every village with more than 500 inhabitants. Hence a liberal recurring grant of Rs 5 million was sanctioned from imperial subsidies that enabled the provincial government to subsidise district boards for the opening of such new schools. This was followed by the Madras Elementary Education Act 1920, as a result of which local authorities were given the responsibility for elementary education. The Act gave powers to levy a special tax to raise funds for education, and introduce compulsory primary education in selected areas based on their financial position. Girls' education benefited: the share of girls in elementary schools rose from one-fourth of all students in 1911–12 to one-third in 1926–27 (Government of Tamil Nadu, 2003).

Second, like its neighbour Kerala, the state of TN was the beneficiary of early social movements after independence. The Dravidian movement, which began in TN, aimed at providing opportunities to all irrespective of his/her caste or religion. Educating the people and eradicating superstition that plagued society was one of its objectives. It had a commitment to social justice which contributed to the education revolution in the state. The Dravidian parties and the earlier Kamaraj regime's biggest achievement was their dedication to providing primary education. Not surprisingly, enrolment of SCs/STs accounted for 24 per cent of total enrolment in 1998–99—higher than the share of SCs/STs in the state (19.2 per cent). This is of interest, since it is precisely the SC/ST children that tend to have the lowest enrolment rates in the northern states—as the authors in this book point out repeatedly.

Third, Tamil Nadu has pioneered various schemes to enhance enrolment in elementary education, such as midday meals (introduced by Chief Minister M.G. Ramachandran). Long before the national midday meal programme began in 1995, in 1982 the Tamil Nadu government introduced this programme to cover all rural children in the 2–9 age group. It was then extended to urban areas and to ages 10–15 in 1984. The government also provides textbooks free to all children up to Class 8 in government and

government-aided schools, as well as free uniforms to all beneficiaries of the midday meal scheme—more children benefit than in other states.

Fourth, the Tamil Nadu government has been quite innovative in seeking out private support for government schools. The government noted that only about half of the schools in the state in dire need of maintenance, more classrooms, and so on, actually received any attention. In 1995 the government devised a scheme to honour private donors by naming the school after them, if they contributed at least 50 per cent of the expenditure to construct a primary school, or constructed two rooms for a school (Radhakrishnan and Akila, 2002).

Finally, the Tamil Nadu government has been successful in bringing down the infant mortality rate below the national average, and as a result the total fertility rate has also declined over time through behaviour change. Kerala and TN are the only states in the country with a total fertility rate of 2. As a result the number of children at primary level in Tamil Nadu started declining in the 1990s. Thus, even if the government now maintains its current level of expenditure it should be able to improve the quality of the teaching–learning experience. Or, as Chapter 8 notes, even though public expenditure on elementary education fell in the 1990s, per capita expenditure was not particularly affected.

Not that all is well with the elementary education system in TN. In 1993 the share of repeaters (repetition rate) was much higher in TN than the average share of repeaters in classes 1–8 in India. In fact, it has been argued that the official claim that the midday meal scheme pioneered in India by TN increased the rate of literacy and reduced the rate of drop-out might have been true in the early 1980s, but drop-out remains high (Radhakrishnan and Akila, 2002). This suggests that the quality of schooling leaves much to be desired—a conclusion that emerges also from Chapter 8.

Two states have made remarkable progress over the 1990s in respect of literacy and elementary education—MP and Rajasthan (see Chapters 4 and 5). In fact, unlike any other state in India, these two educationally backward states increased their literacy rate between Census 1991 and Census 2001 by over 20 percentage points—compared to the increase of 13 percentage points in the national literacy rate.

MP reaped the benefits of having pioneered the Education Guarantee Scheme (EGS). It was the first state to introduce the idea that any village community that did not have a school, and demanded a school from the government authority, would actually get one. In fact, the *guarantee* by the state government was that the school shall be made functional in 90 days. If a community with 40 children has no school within 1 km, the government guarantees that it will pay the salary of a para-teacher (from the community), who should be found by the community. The community is also responsible for finding the space to be used as a classroom. As Panchamukhi (Chapter 5) points out, the result of this initiative was that within three years, the state government opened over 30,000 new schools in MP, when over a 50-year period since independence in 1947, only 50,000 or so schools had come up. Since the success of EGS in MP, the scheme was made into a nationally-applicable scheme. Unfortunately, the government of India eliminated the 90-day clause, thereby undermining the scheme, since delays are typical of the governmental bureaucracy.

One should note that the EGS is not the only reason for the rapid progress in reducing non-enrolment in primary education in MP. MP benefited from the large number of districts that received funds from the District Primary Education Programme (DPEP). It was the largest recipient of the donor-funded DPEP in the first phase of the programme, with 33 districts benefiting. MP is also likely to continue to reap the benefits of a system of decentralised governance of the school system, in which the state has made multiple innovations (see Chapter 5).

Rajasthan had made innovations even before MP did. In 1987–88 it started the *shiksha karmi* programme after realising that universalising primary education will not be possible in 10–15 per cent of the villages of Rajasthan due to teacher absenteeism alone. So two para-teachers, identified by the community, were made in charge of the primary school of the village after receiving training. In the mid-1990s the Rajasthan government followed up with another scheme to increase the number of schools, and thereby enhance enrolment, that became the model for the EGS in MP. The result has been that enrolment has grown remarkably.

However, it is not just that the availability of EGS-type schools has increased in MP and Rajasthan in the 1990s. A number of primary schools have been upgraded to upper primary (or middle)

schools during this period—thus ensuring continuity for children who complete primary schooling (Planning Commission, 2002). Too often children tend to drop out if an upper primary school is not physically present in the vicinity of the home.

What the experience with the para-teachers in Rajasthan and MP is indicative of is that the security of tenure enjoyed by regular grade teachers tends to make them complacent, and takes off the pressure to perform. The contractual basis on which shiksha karmis in Rajasthan and EGS teachers in MP are appointed could be a factor in their remaining more motivated and proactive towards their jobs than regular permanent teachers, although they are far less trained than the latter.²⁵

What is interesting is that once MP and Rajasthan had demonstrated success with opening new schools with para-teachers, the programme spread rapidly, almost like wildfire. WB initiated a similar scheme, and called it *shishu shiksha kendra*. Nearly 18,000 such schools started in WB, which have a million and quarter students in them (See Chapter 7 by Tapas Majumdar). Similarly, UP has a scheme of para-teachers, called *shiksha mitra*, and UP has appointed 30,000 para-teachers—again with the objective of expanding access as well as reducing the pupil–teacher ratio (Chapter 2 by Ravi S. Srivastava).

It appears that as enrolment expanded in the 1990s, partly driven by the midday meal scheme as well as the expansion of facilities in DPEP districts, a problem arose: pupil–teacher ratios began to increase. But since states suffer from serious fiscal constraints, new teachers could not be hired at regular salaries. In fact, teacher recruitment in most states had remained frozen for many years. The response, therefore, by state governments has been to compensate by hiring para-teachers to override the fiscal constraint.

The Government of India initiated in 2002 a programme for universalising elementary education or Educational for All—*Sarva Shiksha Abhiyaan* (SSA). How the SSA will be funded and more importantly, how cost-effectively existing resources will be utilised to achieve its goals of Universal Primary Education (UPE) by 2007 and Universal Elementary Education (UEE) by 2010—the answers to these questions will determine whether the rhetoric of UEE will be matched by reality or not. The structural problems that we discuss above have underlying causes, which derive from the pattern

of public expenditure, the underfunding of elementary education and the consequent poor quality of government schools relative to private ones, and the continuing high out-of-pocket costs of schooling that parents bear—issues on which our analysis sheds new light, and to which we now turn.

The Pattern of Public Spending

While India's central government has been increasing expenditure on elementary education, the overall fiscal problems of state governments are severe—especially in the states that account for three-fourths of the country's children out of school. Since the state governments account for around 90 per cent of total education expenditure in the country, there is little likelihood of elementary education receiving the priority it deserves nationally unless the fiscal problem at the state level is resolved. The ratio of the states' combined fiscal deficit to state domestic product is said to be around 5 per cent.²⁶ The decline in education expenditure in relation to national GDP that occurred through much of the 1990s was accounted for by the sharp decline in state expenditure actually more than offsetting the increasing trend in central expenditure on elementary education (Srivastava, Ranjana, 2005).

The main sources of such fiscal stress have been the long history of high fiscal deficits leading to rising government debt and interest payments, the large increases in government wages and pensions following the Fifth Pay Commission (Acharya 2002, 2004), weak tax revenue performance, and growing subsidies for food, fertiliser, power, water and other items. The net result, especially at the state level, is that once 'committed expenditures' for debt service, pensions and salaries are met, there is hardly any money left for spending on the complementary inputs necessary to provide effective public services, let alone for fresh public investment.

The increased central government expenditures for primary education have come mainly in the form of the centrally-sponsored schemes: DPEP, mainly donor-funded; Operation Blackboard; Midday Meal and Teacher Education.²⁷ The total share of central and state spending on education in GDP had risen to 3.4 per cent in the period 1989–90 to 1990–91, but since then the share of education spending has remained below that level and was 3.1 per cent in 1997–98.²⁸

How does this macro-economic priority to education compare with other countries? The global Human Development Report (UNDP 2004) classifies countries into high (HDI [Human Development Index] above .8), medium (HDI between .5 and .799) and low (HDI below .5) human development levels. India's HDI in 2002 was 0.595 (medium HDI). Countries with a high HDI spend 5.3 per cent of GDP on education. Compared to other medium HDI countries like Thailand (which has a higher GDP per capita than India), India's education expenditure is much lower relative to its GDP: Thailand spent 5.5 per cent of GDP in 2000, compared to India's 4.1 per cent in 1999–2000 (UNESCO, 2004).

More relevant is the fact that the Indian states with the worst record on elementary education spend less as a share of state GDP compared to countries at similar levels of income (for example Bolivia's GDP per capita in PPP [purchasing power parity] terms is \$2,460, or less than India's at \$2,670 in 2002). While Bolivia spends 6 per cent of its GDP on education (UNESCO 2004), West Bengal spent 1.05 per cent; MP, 2.1; UP, 2.16; Rajasthan, 2.62; Bihar, 3.66; Assam, 3.57 per cent of net State Domestic Product over 1995–2000.

However, different states have accorded varying priority to elementary education. An educationally-advanced state like TN had higher per capita spending (Rs 106 per capita) on education, compared with the educationally poor performing ones (UP, Rs 61 per capita; Bihar, Rs 65 per capita) in the period 1995 to 2000. However, within public spending on the entire education sector, it is the priority to elementary education (grades 1–8) that matters if the fundamental right of universal elementary education is to be achieved. In the 1990s the per child spending in elementary education was much higher in high-performing states like Tamil Nadu (Rs 363 in the period 1995–2000) than in educationally backward states (UP or Bihar). MP and Rajasthan, which made major advances in literacy during the 1990s, had much higher per child spending on elementary education (Rs 296 and Rs 293 respectively) than UP (Rs 183), Bihar (Rs 232) and WB (Rs 150). Clearly, there is a case for the poor performing states in elementary education to mobilise additional resources, if the goals of the SSA announced by the central government in 2002 are to be met: completion (not mere enrolment) of eight years of quality education by all children in age group 6–14 by 2010. While central expenditures have

increased since 1991, state expenditures have done poorly in many states after structural adjustment began in 1991 (Srivastava, Ranjana, 2005).

It is state governments that determine the intra-sectoral priority within public education expenditures, namely between elementary, secondary (classes 9–12), and tertiary levels. So what is the fiscal priority accorded by state governments to elementary education? The intra-sectoral allocation of public education expenditures by level remains a problem in a large number of Indian states. For 40 years after independence, until 1990, the problem was that 25–30 per cent of education expenditure was being allocated to higher education (Tilak, 2004). That share fell after 1990. However, the problem is that the share of elementary education in education expenditure has rarely risen above 50 per cent in the history of independent India. This contrasts sharply with the Republic of Korea in the 1950s, when it allocated over two-thirds of education spending to *primary* education (or five years of schooling, as opposed to India's elementary classes 1–8). Approximately 30 per cent of total elementary education expenditure in India is spent on the middle level (classes 6–8), with the remaining 70 per cent going to primary schools.²⁹ On that basis, not only is the share of education in GDP lower in India, but the priority to primary education is lower: thus, India (central and state government together) allocated 35 per cent of its education budget to *primary* education, Thailand allocated 56 per cent of its education expenditure to the primary level, and Korea 44 per cent in 1990, and not much different in 2000.

Since the beginning of the 1990s the problem in India as regards allocation of education expenditure by level has not been with the share of higher, but of secondary education.³⁰ On average in Indian states the share of secondary education in total education expenditure in the 1990s has been in the range of 30 to 33 per cent. When comparing public spending by level with other developing countries, it should be borne in mind that the share for secondary education in India is only for four years (grades 9–12), while in all other countries it is for either six or seven years (Classes 7–12 or 6–12). In other words, one would expect that the share of government expenditure on education for secondary education in Indian states should be almost always less than that in other developing countries. The facts are otherwise. In most Indian states

the share of secondary education is higher than in Latin American middle-income countries, although they have secondary enrolments higher than those in most Indian states. India's secondary expenditure share is also higher than in low-income African countries, with lower secondary enrolment rates than Indian states.

Indian states can be classified into two types, using the share of secondary in total education expenditure as a criterion: those which allocate less than 25 per cent, and those which allocate more than 30 per cent. Those in the first group (Assam, Bihar, MP, Orissa) all have lower secondary enrolments (relative to the national average) and have tended to allocate at least 55 per cent of education spending to elementary education (they have demographic reasons for doing so, since they have a high fertility rate and hence larger than average elementary-age cohort size). Even for them to be allocating to secondary education nearly as much as low-income African countries, when secondary education involves only four years, does not appear justifiable. It is largely the children of the non-poor who have access to secondary education in India and who have the ability to pay the out-of-pocket costs of secondary schooling. Public subsidisation of free government schooling at secondary level, in a situation where primary education, let alone middle, is far from universal, has adverse consequences for equity.

In the second group of states there are two sub-categories: those with relatively high elementary and secondary enrolments (Gujarat, HP, Karnataka, Kerala, Maharashtra and TN);³¹ and those with low elementary and secondary enrolments (Rajasthan, UP, AP and WB). For the former, the high elementary enrolment rates imply that the transition rate to secondary education is going to be higher; so their relatively high allocations are probably justified (though, as stated earlier, for a four-year period the shares still look higher than other low- and middle-income countries).

However, for the states in the second sub-category with the worst elementary education indicators to be allocating as much as they do to secondary education seems inequitable. This inequity is accentuated by the fact that at least in UP and WB the relatively high share of secondary-level spending is accounted for by the high share of all enrolled at secondary level who are in private secondary schools (that is the private-aided schools). Thus, in UP 51 per cent of secondary enrolments in 1995–96 (NSSO 50th Round)

were in private-aided schools, and in WB that share was 47 per cent. The share was 27 per cent in Orissa, 22.7 per cent in TN, 15 per cent in AP, 12.7 per cent in Rajasthan, and 11.3 per cent in MP (Panchamukhi and Mehrotra, 2005). Such schools are provided subsidies by the state in the form of salaries for their teachers. This is essentially a process of the state absorbing the schooling costs of those who can afford to pay. The share of primary education in WB's public education spending is barely comparable to that of middle-income African countries (which have higher primary and secondary enrolments) and lower than that of low-income ones. The allocation of government spending to secondary education caused by this diversion to private aided schools is a factor in the fiscal squeeze on elementary education.

The fiscal squeeze at elementary level has prevented state governments from hiring teachers at regular salaries, and a ban on teacher recruitment exists in many states. Teacher salaries account for about 97 per cent of total elementary education expenditure (World Bank, 1997). Contrast that with other countries where the record on primary education is far superior. Primary teachers' salary as a share of public current expenditure on primary education was only 82 per cent in Indonesia, 73 in Malaysia, and 87.5 per cent in the Philippines (for 2000). It was even lower in Western Europe: 67 per cent in Austria, the same in Italy, and 81 per cent in Ireland (UNESCO, 2004). The high share of teacher salaries in primary recurrent expenditure in India has meant that the states have been forced to hire para-teachers at a fraction of regular salaries, but that creates its own set of problems (as discussed in later chapters).

Central expenditures on elementary education increased in the 1990s primarily because the central government finally agreed at the end of the 1990s to borrow externally for elementary education. A number of Externally Aided Projects (EAPs) initiated mainly during the 1990s, with small beginnings made in the mid-1980s, focused attention on different aspects of the primary sub-sector of elementary education. In addition to the strategies for improving access and retention of, especially, the disadvantaged groups, these EAPs have supported initiatives for improving the quality of primary education. Here the focus was on improving the training of teachers and teaching-learning processes, textbook and curricular

reforms, and the provision of innovative teaching and learning materials. However, the regional spread of externally-aided programmes has been quite uneven and several educationally-developed states have received higher per capita resources compared to educationally-poor states like Bihar (Bashir, 2000). In other words, contrary to the expected outcome of central funds equalising resources across states, especially by targeting states with lower resources, the central transfers are not playing that role. While there is clear need to reward states that mobilise resources for education from within the state (either through taxation or reallocation within the state budget), there is also a need to take into account the requirements of states based on their outcome indicators (Dev and Mooij, 2002).

There is yet another major issue here—the fact that central government funds for elementary education are sanctioned to the states, but they are either not released or not utilised (see for example chapters 3 and 8 in this volume). There is a systematic discrepancy between funds sanctioned for both the DPEP as well as the SSA and funds actually released. Thus at a national level, as of the end of fiscal year 2002–03, SSA funds sanctioned were Rs 30.78 billion, but the amount released was Rs 11.72 billion. Similarly, for DPEP, the amount sanctioned was Rs 22.90 billion, but only Rs 10.55 billion was released (Department of Education, 2003). Our discussions with the Ministry of Education in the central government revealed that this tends to happen primarily for two reasons: one, a poor utilisation record of the state government, and two, poor management practices in the transactions between the central and state government. While the first reason is perhaps related to poor administrative capacity at the provincial level (a long-term problem), actions have already been taken in 2004 and 2005 to improve management practices—so that the flow of funds has apparently improved.

As long as the state school sector remains underfunded, it provides the opportunity for the private sector to fill the gap—even though the historical experience of the now industrialised countries (Mehrotra and Delamonica, 2006) as well as that of the high achievers among developing countries (Mehrotra and Jolly, 1997) shows that it was public action that led to the universalisation of schooling in both groups of countries.

The Private Sector in Elementary Education

The Unicef survey reveals that at elementary level, most of the schools in *rural areas* are government ones, over 90 per cent of them. Only in UP and TN does that share drop to 73 and 74 per cent respectively. However, in urban areas, the share of total enrolment at elementary level in government schools is much lower: UP, 49 per cent; TN, 51 per cent; Bihar, 53 per cent; Rajasthan, 57 per cent; MP, 68 per cent; Assam, 75 per cent; and WB, 95 per cent.

The share of private unaided schools in enrolment in urban areas, in descending order, is: UP, 33.5 per cent; Rajasthan, 32.4 per cent; Bihar, 28 per cent; MP, 19.33 per cent; Assam, 17.6 per cent; AP, 17 per cent; and WB, 3 per cent.

The pure private sector has expanded particularly in those states of India that have the most dysfunctional government school system—as the Unicef survey shows. Our analysis elsewhere of national level data (NSSO 52nd Round, 1995–96) showed that the latter states also tend to be the states with the lowest per capita income in the country, showing the willingness of even poor parents to pay for schooling (even though the ability may be lacking); in other words, demand for schooling remains high (Panchamukhi and Mehrotra, 2005). However, private schooling has also expanded in states with some of the highest per capita income (Punjab and Haryana); it is difficult to assess whether this is any more than a reflection of ability to pay of the relatively well-off in these states. Private schooling is also gender-biased (against girls, who are a larger share of the children out of school), and does not help to redress the bias against the lower castes. The lower castes, which have much lower enrolment rates than the upper castes generally, are less likely to be enrolled in fee-paying schools than the upper castes (as also argued by Tilak and Sudarshan, 2000). Nevertheless, demand for such schools appears to be high, one reason being they offer English as a subject (which is introduced in government schools after the primary level, that is grade 6) (PROBE, 1999).

The Unicef survey enabled us to compare facilities, both in terms of physical infrastructure and human resources, between government and private schools. In the states where the private unaided schools account for a significant share of enrolled children—UP, Bihar and Rajasthan—the proportion of urban unaided schools which are pucca (in brick buildings) is higher than the proportion

of government schools that are pucca. The problem of one-classroom schools is also largely confined to the government schools. Private aided schools do not have this problem. Similarly, most of the private unaided schools do not seem to have a space constraint in terms of classrooms.

Most schools in the selected states have drinking water facility. Where they do not, the problem appears most serious in government schools, as they have the largest share of schools with no drinking water. In all states except UP, the problem of no drinking water is non-existent in private unaided schools in both rural and urban areas. In all selected states (except one) private unaided schools tend to have a higher proportion of schools with toilets for staff than government or private aided ones. Many more private unaided schools (and private aided ones) in urban areas have separate toilets for girls than do government schools.

The survey shows that the problem of single-teacher schools is confined to government schools—especially in the rural areas. Government school teachers are part of the civil service, wherein staff is transferable within the state from school to school; but teachers are able to avoid postings to remote rural areas, where the problem of single-teacher schools is likely to be most concentrated. Government schools of most selected states (UP excepted) have higher pupil-teacher ratios (well over 40 in most states) than private schools, particularly in rural areas.

While over 90 per cent of government schoolteachers are trained, the overwhelming majority of private unaided schoolteachers in both rural and urban areas in all states are untrained, according to the survey. Untrained teachers also account for a higher share of teachers in private aided schools than of regular government schools. Also, private schools (especially unaided ones), more than government schools, generally hire teachers on a temporary basis. Most government schoolteachers are permanent employees of the state government. The average salary of teachers in private schools is much less than in government schools.

When one combines these facts with the widespread known phenomena of teacher absenteeism in government schools, it speaks volumes for the inefficiency of the government school system. The well-paid, permanently employed, well-trained government teachers, often do not turn up to teach; though, in some situations, one cannot blame them given that they are teaching a

huge class, consisting of multiple grades, possibly in a single-classroom school!

The reported school working days are much lower in government schools, and in many actually less than the 180 days that pedagogues regard as an absolute minimum. Generally the number of working days in private unaided schools is much higher than in government schools—which is one indication that despite having poorly paid, temporary and untrained teachers, they actually function. The drop-out rates in government schools is found to be much higher than in private schools. More private schools tend to have a higher promotion rate than government schools. The attendance rates in all states in government schools is usually lower than for private unaided schools—as per head count on the day of the survey—in both rural and urban areas.

However, there is no firm evidence in India of better learning achievement of children in private schools. Second, we also know that the taking over of private schools by the state has had adverse equity effects. Third, we know that the unrecognised and recognised private unaided schools are almost totally unregulated, despite their considerable importance in terms of enrolment in several states. In fact, the fact that the private schools have better infrastructural facilities (and also advertise themselves as offering 'English-medium' education)³² does not mean that the quality of the teaching-learning experience is much better than in government schools; if anything, we noted that the teachers are poorly trained compared to government teachers. If UEE is to be achieved, the efficiency and equity of the entire educational system has to improve—not just of the public sector.

As we noted earlier, the private unaided sub-sector is very large in the states with the most children out of school (UP, Bihar, Rajasthan, AP)—a clear indication that where the public system is dysfunctional private providers fill the gap. Worse still, having set up shop, private unaided schools lobby with state governments to secure government aid (Kingdon and Muzammil, 2003). The private aided schools' share in enrolment tends to rise with the level of education: except in some states, it is relatively low at the primary level, rises sharply at the upper primary level, and is the highest at the secondary level (Panchamukhi and Mehrotra, 2005).

The pure private sector (unrecognised and unaided schools) is in urgent need of greater regulation, in order to improve quality

in such schools. The most important need for regulation arises from the urgency to contain the practice of converting private schools into government aided ones, a decision which has serious efficiency and equity effects.

The Unicef survey data show that the share of private aided schools in total enrolment was low in rural areas, but quite significant in urban areas. Thus, in ascending order, the share of private aided schools at elementary level in urban areas was: 2 per cent in WB, 8 per cent in Assam, 10.4 per cent in Rajasthan, 12.2 per cent in MP, 17 per cent in UP, 19 per cent in Bihar, 22 per cent in AP and 43 per cent in TN.

Two consequences follow for the public system from this conversion of unaided to aided schools. First, contrary to the principle that a fiscally-squeezed state should target its subsidies to the poor, the state now subsidises those able to pay. Teachers also stop being accountable to either parents or the private management, with worse outcomes for children. Second, teachers begin to be paid salaries directly by the state government and their salaries rise dramatically. The impact on government spending on public elementary education is adverse. Thus, a significant proportion of government expenditure at each level, but especially the secondary level, is now diverted to this kind of subsidisation of the non-poor.³³ Aided schools could combine the accountability of private schools with the equity of government schools, provided they are regulated.

Household Costs

Elementary education has become a fundamental right of every Indian citizen, since the Constitutional Amendment of 2002. The challenge of universalising elementary education, however, cannot be met merely by action on the supply side, that is by reforming the public delivery system and public finance, and by regulating the private sector in schooling. The demand side will also need to be addressed—that is a clear message from the data emerging from the Unicef survey. As long as the out-of-pocket costs of sending a child, especially a girl, to school are seen as onerous the dropout rate will remain a challenge.

According to the National Accounts Statistics of India, the share of private expenditure on educational services to total private

consumption expenditure increased from around 2.5 per cent in the early 1980s to over 3.5 per cent in the late 1990s (Planning Commission, 2002). This reflects household expenditure on all levels of education, not just elementary. However, it does show that the presence of private and missionary schools from the kindergarten to vocational and professional colleges is growing in the country. It also reflects the growing out-of-pocket costs for parents of sending children to government schools.

The Unicef survey collected information about household costs as a deterrent to effective demand for schooling. It finds that the out-of-pocket costs to households of sending a child to school remain significant. For elementary stage as a whole, the annual household expenditures per child range was between Rs 626 and Rs 1,188 in rural areas, and Rs 1,245 and Rs 2,292 in urban areas in the selected states. The cost of sending children to a private unaided school is greater compared to government school costs by a factor ranging from 1.4 in Rajasthan to 1.9 in Assam or UP for elementary education.³⁴ In addition, there are opportunity costs; in Bihar States (Bihar, MP, Rajasthan and UP) the opportunity costs are larger than in other states. Families tend to spend more on elder children than on younger children, more on boys than on girls. In poor states like MP, Rajasthan, Bihar and UP incentives (free uniforms, midday meals, free textbooks) are too low to be effective.

When one compares the household expenditure per child with average per capita consumption expenditure (in 1999–2000), the magnitude of the burden borne by parents of sending children to school becomes clear. Sending a child to a primary school in rural areas can cost the family anywhere between 11 and 15 per cent of its monthly per capita consumption expenditure in the seven states under discussion here.³⁵ In urban areas the monthly household expenditure on primary education per child as a proportion of per capita consumption expenditure per month is even higher: ranging between 11 per cent in WB to 21 per cent in Assam.³⁶ Even allowing for the fact that incomes are higher than consumption expenditure, these proportions are still forbiddingly high.

At middle level, the cost per child relative to per capita consumption expenditure rises even further. In rural areas, it ranges from 18 per cent in Assam to 30 per cent in TN,³⁷ and in urban areas it is between 15 per cent in TN to 27 in Rajasthan.³⁸ Given that the total fertility rate in all these states is between 3 and nearly

5 (except in TN where it is 2), the costs of sending more than one child to school would be a challenge to most poor households. And under these circumstances, it is girl children who suffer—as respondents repeatedly told us in the focus group discussions.

Thus, while school quality remains poor, part of the reason why elementary education in India is not universal could be attributed to household constraints.³⁹ Historically, the response of the state has been direct interventions in the shape of incentives (which are also examined in later chapters). The union as well as state governments have adopted various kinds of incentive schemes with an aim to compensate direct costs to some extent. Some of these are meant for all students (midday meal), some for those identified as educationally deprived (SCs, STs and girls—such as free textbooks under DPEP and SSA, and free uniforms in many states), some only for girls (attendance scholarship for girls in certain states) and some only for girls belonging to educationally deprived social groups (free uniforms for SC and ST girls in some states). The coverage varies from one state to the other and in many states only a small percentage of target groups actually get covered.

The impact of the incentive schemes implemented by the states has been low. Indeed, the survey finds that only a small proportion of children benefits from the incentive schemes that include free textbooks, scholarships, midday meals and fee waivers. Moreover, the unequal distribution is biased towards urban areas and results in limited access to benefits by backward castes in rural areas.

Incidentally, half of the expenditure on centrally-sponsored schemes goes to the midday meal programme. The Supreme Court ordered in 2002 to the effect that instead of dry rations, children should be provided with cooked meals. At the time very few states provided cooked meals. There is evidence from high achievers in education that a cooked meal played a role in bringing and keeping children in school (Mehrotra, 1998). We have noted the success of the TN midday meal programme in increasing enrolment and attendance. Nevertheless, only five states—Gujarat, Kerala, Orissa, TN and MP (tribal blocks)—provided cooked meals in the early part of this decade. This is probably because the cost of the dry rations are met by the central government, while the cost of cooking meals has to be borne by state governments. In fact, where cooked meals have been introduced as a result of the Supreme Court order

enrolment has improved (Drèze and Goyal, 2003). The Supreme Court order has meant that the states providing cooked meals has gone on increasing with time.

There is evidence that the midday meal scheme, which is the centrepiece of the central government's incentives programme, remains underfunded. Thus, the number of children covered by the programme has increased in the 2000s, but the resource allocation to the scheme has declined. The number of children increased from 30 million in 1995–96 to about 100 million in 2002–03. The allocation fell from about Rs 16 billion to Rs 0.1 billion during the same period (Tilak, 2004).

3. CONCLUDING REMARKS

Although the agenda for reform is broad, the resources constrained and the political economy constraints to reform far more serious at the state (as opposed to the central) government level, one has to be guarded about making projections about future success of the UEE agenda. The hope comes from the fact that between Census 1991 and 2001, two of the poorest and educationally most backward states—MP and Rajasthan—achieved improvements in rates of literacy that they had not achieved ever before and which were unsurpassed by any state. While the national literacy rate grew by about 13 percentage points (52 to 65 per cent), these two states notched up rates of just over 20 percentage points. Some reasons were hinted at earlier: effective decentralised decision-making (for example through the EGS mechanism in MP, and the *lok jumbish* and *mahila samakhya* in Rajasthan); and the higher than average per capita spending on elementary education.

However, the most serious constraints on reforming the elementary systems in most states still come from mainly two sources: the serious fiscal deficits of state governments and the inability or unwillingness of state governments to improve the accountability of teachers to the community. The latter can only happen if state governments genuinely decentralise decision-making to the panchayats in respect of schooling. The effectiveness of decentralized governance of schools can be judged by the fact that MP, which promoted panchayati raj institutions consistently over the past decade, has one of the lowest teacher absence rates in the country. Until the accountability of the government school and school

teacher changes significantly in the direction of the parents as opposed to higher levels of the bureaucracy in the vertical line ministry (that is the ministry of education), the prospects for improvements in school effectiveness are poor. No amount of additional resources can change the quality of schooling without the systems of accountability changing. Unfortunately, despite the existence of Panchayati Raj Institutions (PRIs) for over a decade now, state governments have shown little interest in transferring funds, functions and functionaries to the PRIs (Mahipal, 2004). Without any depth in the democratic decentralization, there is little likelihood that the pattern of accountability of the school system will change.⁴⁰ The evidence from later chapters (e.g., 2 and 3), though tentative, suggests that efforts at local-level accountability put in place thus far (for example VECs, PTAs, School Management Committees) are either few and far between or, where existent, quite ineffective because they are a prisoner to the local-level power imbalances in society.⁴¹

Fiscal deficits of state governments also show little sign of changing. Just because the Government of India has a campaign to achieve universal elementary education (SSA), does not mean that the resources will be there to hire the additional teachers and reduce pupil-teacher ratios. These are a *sine qua non* for the improvement of quality in the school system—especially in the states examined in this book. Without an increase in spending on elementary education, the household costs that deter parents from sending their children cannot be reduced. Nor can the incidence of single- and two-teacher schools decline. Nor can the pupil-teacher ratio improve. Nor can the infrastructure of the government school system—which was systematically shown to be poorer than that in private unaided schools—be rehabilitated.

The 2004 budget of the central government levied an education 'cess' or tax of 2 per cent on all central taxes, to finance the commitment to universalise access to basic education. This kind of earmarked tax was originally proposed in a report to the Ministry of Human Resource Development, Government of India in 2001.⁴² This measure will yield a total revenue of Rs 50 billion per year.⁴³ This constitutes 10–12 per cent of total government expenditure on elementary education for the central and state governments annually. The Tapas Majumdar Committee (in the late 1990s) had estimated that the additional cost of universalising elementary

education over a 10-year period would amount to Rs 137 billion annually (or about 0.7 per cent of GDP additional annually). Hence, the education 'cess' will make a significant contribution, but probably will still not be enough. Improving efficiency and effectiveness of resource use will be critical.

In the 1990s external assistance for elementary education increased sharply. It grew from Rs 370 million in 1993–94 to Rs 12.1 billion in 2001–02. This was mainly plan expenditure. Of the central government's plan expenditure on education it grew from 5 per cent to 20 per cent in the same period. As a share of the central government's elementary education plan expenditure, external assistance grew from 10 per cent to 30 per cent. If the current timetable of universalising elementary education by 2010 is to be met, either the size of external assistance or the government's own expenditure may have to increase.

That is why innovative methods of financing elementary education become a necessary condition for universalising elementary education. The fact that elementary education became a fundamental right after a constitutional amendment in 2002,⁴⁴ means that if governments fail to deliver on the fundamental right, public interest litigation may be used to compel the state to deliver.⁴⁵ But the methods of financing will still have to change, given that the state revenue to GDP ratio is unlikely to rise in the short run. If neither of these developments occurs, universalising elementary education by 2010—as envisioned by the government of India (in the SSA)—will remain a mirage.⁴⁶

This will be a tragedy not only because it will delay the demographic transition (as we noted at the beginning of this chapter). It will also be a huge tragedy since it will serve to deepen the increasing income inequalities in the country that have characterised the growth process during the 1990s (Sen, 2000). The poor cannot improve their human capabilities without functioning schools, nor take advantage of market opportunities as they arise. We began by commenting on the segmentation of the school system in India, and for that matter in all of ex-British India—with its English-medium missionary-run schools on the one hand for the ruling classes, and the vernacular-medium government schools on the other for the ruled masses. Without a functional government school system, market forces (including the growing privatisation of

the school system) will continue to reinforce growing income inequalities—deepening the serious social fault line along the medium-of-instruction of the school one went to.

Let us close, as we began, on a historical note; and, in fact, some international comparisons on the contemporary consequences of historical colonial legacies. This social segmentation along lines of the language-of-instruction of the school one attended is particularly characteristic of Anglophone and Francophone ex-colonies. In South Asia and in Sub-Saharan Africa⁴⁷ the consequence of English- and French-education for the elite has been a social segmentation that is driven by the education system. In much of East and South East Asia, there is very little of this social segmentation: Thailand, Indonesia or Korea may not be blessed with the elites who speak English fluently, but at least they universalised elementary schooling early in their development process. Their school systems were not blighted by this segmentation based on the language of instruction—with the elite private schools teaching in the international language, while the rest of their country-folk plodded along in underfunded government schools where they were taught in their mother tongue. Even in Latin America, the government school system is seen as offering a reasonable quality education, with the private schools seen as an escape valve for those who do not survive the government system.⁴⁸ Only in South Asia and Sub-Saharan Africa is the sub-standard government school system the driver of inequality and of social segmentation—and in some ways a source of inter-generational transfer of poverty.

APPENDIX 1A-1

METHODOLOGY OF THE SURVEY*

The survey reported in the study was carried out by CONCEPT during the second half of 1999, based on a research design prepared by the lead consultants.

The survey consisted of the following components:

* This appendix draws upon Santosh Mehrotra and Ranjana Srivastava (2005). 'Elementary Schooling in India: Producing Human Capital to Unleash Human Capabilities and Economic Growth', in Mehrotra et al. (2005).

1. Census: Enumeration questionnaires were canvassed among all households in sample units regarding demographic and education characteristics, focusing on children between the ages 5–14 years.
2. Household questionnaire: Once the households had been enumerated, all households with children were classified into the following four strata: (a) households with currently enrolled children in formal schools; (b) households with dropouts; (c) households with never-enrolled children; (d) households with children in alternate schools. From each stratum, three households each were sampled, and the views/information of these households on schools, education, costs of education, incentive and so on were collected through the household questionnaires.
3. Schools: In the rural areas, all schools within the village were sampled. In the urban area, at least two schools within, or in proximity to, the Urban Enumeration Area or UEB (a term used by the Registrar General of India documents) were selected and detailed school-level information was canvassed through school records, the head teacher and personal observation/inspection.
4. Teachers: In each school at least two teachers, including the head teacher in all cases, were questioned to collect information on the teachers and to gather views on the school, training process, dropouts and so on.
5. Community interaction/field notes: Group discussions with villagers were duly recorded in field diaries and supplemented with field notes and observations of the investigators.

The units for the study were the village in the rural areas and the UEB in the cities and towns. The survey was carried out during the second half of 1999 (over the academic year 1999–2000) and covered more than 120,000 households and 1,000 schools spread over 91 districts in the eight states.¹ The rural sample was based on 34 districts, four per state for all states except UP which had a sample of six districts. The urban sample of 80 towns and cities was spread over 64 districts. While most towns and cities fell in a different set of districts, a few districts coincided with those covered under the rural sample. The sample size was fairly large and comparable with major national level surveys.²

SAMPLING DESIGN

A multi-stage stratified sampling technique was used to select districts and cities and sub-samples. In the first stage, the selection of districts for the rural areas and cities and towns for the urban areas was based on Primary Census Abstract lists (1991) of the states by using a circular

systematic random sampling technique. In the second stage, villages and UEBs stratified according to population categories were selected by using the random sampling technique. The third stage consisted of selecting the households for in-depth study, in addition to census coverage of households for complete enumeration, and of schools and teachers for educational details.

SELECTION OF DISTRICTS AND VILLAGES

Table 1A.1 provides the list of districts in the sample. In the rural sample, for most states two sub-samples consisting of two districts each were selected using the circular systematic random sampling technique. For UP alone, considering its huge size, three such sub-samples with a total of six districts were selected. In all, 34 districts were selected for the rural sample.

For each of the districts selected as above, nine villages were selected for data collection. Villages were stratified before selection. Villages with less than 100 households were excluded in each of the districts, and the remaining villages were stratified into three sub-samples of large, medium and small, based on the number of households per village. As in the case of the selection of districts, the random sampling technique was used to select three villages from each stratum to form nine villages per district. In all, 306 villages were selected in the eight states.

URBAN SAMPLE OF CITIES, TOWNS AND UEBs

Similarly, the cities and towns were stratified according to population size into four categories (below 50,000; 50,000–199,999; 200,000–999,999; and above 1 million). The Primary Census Abstract data were used to select the towns and cities randomly within each state. Four towns each in the first two categories and one city each in the third and fourth categories were chosen in each state.

The Registrar General of India has classified each town and city into urban wards, further sub-divided into UEBs consisting of roughly 150 households. A random sampling technique was applied to select eight UEBs per category of town and city. A total of 32 UEBs per state and 256 UEBs for the eight states were selected for the urban sample.

Households

With the village or UEB as the unit, complete enumeration was conducted by canvassing the enumeration schedule in the selected village or UEB.

In addition, an in-depth survey of households was conducted for a select group stratified according to enrolment and non-enrolment status:

- households with currently enrolled children in formal schools;
- households with never-enrolled children;
- households with dropout children;
- households with children enrolled in alternative schools.

Ten households per stratum were randomly selected in each village or UEB, the strata being mutually exclusive (that is once a household was classified under one stratum, it was excluded from other lists). Three households each with currently enrolled children, never-enrolled children and dropouts, and one household each with children attending alternative or Non-formal Education (NFE) schools were selected for the sample. The household schedule was canvassed among the selected household for a detailed survey.

Schools and Teachers

Schools and teachers were not selected on a sample basis. All schools, formal or alternative, falling within the jurisdiction of a village or UEB boundary were surveyed irrespective of the type of management, level or recognition status. In the urban areas many UEBs did not have a school within their boundaries because of their small area. In such cases, schools in their vicinity were covered to ensure the inclusion of at least two schools in and around a selected UEB. An effort was made to survey at least one private school in the vicinity of a selected UEB in such cases. Data from schools were collected by canvassing the formal and alternative school records as appropriate. The teachers' schedule was used to interview all teachers. On an average, three teachers per village or UEB were interviewed.

Appendix Notes

1. There were 25 states in India in 1999, which were further divided into over 500 administrative districts. Each district has on average a population of about 2 million people. UP has the largest number of districts—68. In fact, the eight states in the study are among the largest and most populous of the country. The lead consultant for AP did not produce a study, hence there is no chapter on AP in the book. For UP, MP and Bihar the analysis refers to these states before they were divided.
2. In fact, the sample is much larger. For example, NFHS had a sample of 3,000 interviews of eligible women for states having a population of 25 million or less in 1991 and 4,000 interviews for states having a population of more than 25 million.

Table 1A.1
Districts Covered in the Unicef Survey:
Rural and Urban Samples in Selected States

State	No. of Districts	Rural Sample Districts		Spread of UEBs in Districts	
		(Nos)	Districts	(Nos)	Districts
Assam	8	4	Jorhat, Kamrup, Silchar, Sonitpur	7	Barpeta, Dibrugarh, Jorhat, Kamrup, North Kachar Hills, Sonitpur, Tinsukhia
Bihar	12	4	Begusarai, Dumka [@] , Ranchi [@] , Siwan	9	Bhojpur, Dhanbad [@] , Gaya, Hazaribagh [@] , Kodama [@] , Patna, Ranchi [@] , Saharsa, Vaishali
MP	12	4	Bilaspur [#] , Mandla, Rewa, Ujjain	10	Bilaspur [#] , Bhopal, Chhindwara, Datia, Gwalior, Hoshangabad, Rajnandgaon, Rewa, Sagar, west Nimar
Rajasthan	11	4	Bharatpur, Bhilwara, Churu, Pali	8	Bundi, Churu, Jaipur, Jodhpur, Jhalawar, Kota, Nagaur, Sikar
TN	11	4	Kamarajar, Ramanathapuram, Salem, South Arcot	7	Chengalpattu, Chennai, Coimbatore, Nagapattinam, North Arcot, Periyar, Tiruchirapalli
UP	16	6	Garhwal ^{\$} , Gonda, Kanpur, Lalitpur, Mathura, Varanasi	10	Aligarh, Azamgarh, Bijnore, Bulandshahar, Kanpur Dehat, Lucknow, Mau, Meerut, Saharanpur, Sonbhadra
WB	8	4	Burdhwan, Medinipore, Murshidabad, North 24 Parganas	6	Birbhum, Burdhan, Calcutta, Hoogli, Nadia, North 24 Paraganas
Total	78	30		57	

Notes: [@]Now in Jharkhand. [#]Now in the bifurcated state of Chhattisgarh. ^{\$}The district is now in Uttaranchal.

Notes

1. The British government took over the reins of power from the East India Company only in 1858.
2. Macaulay's own understanding of India is reflected in the 1835 'Minutes':

I have no knowledge of either Sanskrit or Arabic...I am quite ready to take the Oriental learning at the valuation of the Orientalists themselves. I have never found one among them who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia (reproduced in Young, 1952).

Macaulay's own view of India was, as Sen (1997) notes, heavily influenced by James Mill's very influential *History of British India* (1817), who supported bringing a barbaric nation under the reformist British Empire; Mill wrote the history without ever visiting India, or knowing Sanskrit, Persian or Arabic.

3. To give a sense of magnitude, for instance, in Rajasthan, there were 156 government primary schools in 1932, and 254 private primary schools (Government of Jaipur, 1932, cited in Rajasthan Human Development Report, 2002).
4. Art, agriculture, painting, logic, grammar, philosophy, astronomy, literature, Buddhism, Hinduism, Arthashastra (Economics and Politics), law and medicine were among the subjects taught and each university specialised in a particular field of study. Takshila specialised in the study of medicine, while Ujjain laid emphasis on astronomy. Nalanda, being the biggest centre, handled all branches of knowledge, and housed up to 10,000 students at its peak.
5. Thus, the incidence of poverty (in per cent) was as follows: UP, 31; Bihar, 42.6; MP, 37.4; West Bengal, 27—compared to Kerala's 12.7, Karnataka's 20, and TN's 21 (Planning Commission, 2002).
6. Bihar, UP, MP and Rajasthan—whose names give the acronym Bimaru (or, in Hindi, sick).
7. The survey was financed by Unicef India.
8. The states were purposively selected; but the sample within each state is a representative sample for the population of that state.
9. A survey based on a representative sample is by definition sample-based (with collected data from four to six districts per state; see Appendix 1A-1 for details), and not a census of the whole population of the state. Since it does not collect data about *every* district of the state, it does not generate data that would enable the authors to compare outcomes by district.
10. This is the chapter that is reproduced in Govinda (2002).
11. However, these are briefer studies and were not intended to analyse each state's finances at length.
12. Vaidyanathan and Nair (2001) have very little analysis of the public expenditure issues in their edited book, which has chapters on MP, Maharashtra, UP, Kerala, TN, Rajasthan, Bihar and Orissa. The book is devoted to an analysis of the data from the primary survey in two districts in each of these

states. The questionnaire focused on the functioning of the government school system.

13. Govinda (2002) has a chapter on private schools which analyses the changes in private schooling between the 5th and 6th Education Surveys of the National Council for Educational Research and Training, conducted in 1986 and 1993 respectively.
14. The National Sample Survey Organisation (NSSO) has carried out another round, the 55th Round in 1999–2000, which is intended to only provide data on enrolments, as opposed to the other aspects of education addressed here in the present volume.
15. External sources account for about one-third of the total central government expenditure on elementary education at the beginning of the current decade.
16. We are able to incorporate references to AP here (although there is no chapter in this book on AP) because of the cross-state analysis of the data from the survey in Srivastava (2005).
17. On West Bengal, Amartya Sen's Introduction to the *Pratichi Education Report* (Pratichi India Trust, 2002) notes:

We encountered some disturbing evidence that primary school teachers often show much less regard for the interests of children from poorer and lower caste backgrounds. We observed much greater teacher absenteeism in schools with a majority of children from scheduled castes and scheduled tribes (75 per cent), compared with other schools (33 per cent).

18. Thus, according to the Unicef survey, rural pupil–teacher ratios at primary level are: Assam, 37; TN, 38; MP, 43; West Bengal, 44; Rajasthan, 56; Bihar, 62; and UP, 67. Incidentally, the Government of India's Ministry of Human Resource Development, *Selected Education Statistics 1997–98* reports that pupil–teacher ratios in the same states (not disaggregated for rural and urban areas) are: Assam, 37; TN, 39; MP, 44; WB, 57; Rajasthan, 42; Bihar, 62; and UP, 42—but these are based on administrative statistics, as reported by the school, not survey-based. At a national level, the MHRD data shows not much deterioration in the pupil–teacher ratio over three points of time (1982–83, 1992–93, 1997–98): 40, 45 and 42 for primary and 34, 43 and 37 for upper primary levels.
19. The other rates were: Peru, 11 per cent; Ecuador, 15 per cent; Papua New Guinea, 15 per cent; Bangladesh, 16 per cent; Zambia, 127 per cent; and Indonesia, 19 per cent.
20. The rates are (in per cent): Maharashtra, 14.6; Gujarat, 17; MP, 17.6; Kerala, 21.2; HP, 21.2; TN, 21.3; Haryana, 21.7; Karnataka, 21.7; Orissa, 23.4; Rajasthan, 23.7; WB, 24.7; AP, 25.3; UP, 26.3; Chhattisgarh, 30.6; Uttaranchal, 32.8; Assam, 33.8; Punjab, 34.4; Bihar, 37.8; Jharkhand, 41.9.
21. The two most commonly stated reasons for absence were 'authorized/informed leave' and 'official teaching related duty'. What is interesting, however, is that only 50 per cent of the absences claimed to be 'authorized' were supported by documentation—and even the letters of authorization are inconclusive, as school inspectors suggested that teachers sometimes deposit letters requesting leave to be produced if an inspector shows up. Sixty per

- cent of cases where reason for absence was 'official teaching related duty' were attributed to meetings and training, 25 per cent to exam supervisions at other schools; the authors did not have a way of verifying these stated reasons. Official non-teaching related duty such as elections and public health campaigns take up no more than two to three days a year, but the presence of these duties allows shirking teachers to claim a false alibi for their absence.
22. Kremer et al. (2004) point out that an active PTA (even when measured by the weak indicator of having met in the past three months) is correlated with 1.5 per cent lower teacher absence.
 23. See Mehrotra (2002) for an elaboration of this argument.
 24. It was then called Madras, which included the backward areas of what is now AP as well as the backward part of what is now Kerala—Malabar—which together had the effect of reducing the literacy rate in Madras Presidency.
 25. However, we should add it is difficult to state this with any degree of certainty; the Unicef survey did not include focus group discussions with teachers, but only with parents.
 26. The central government's fiscal deficit to GDP is an additional 5 per cent or so since the mid-1990s.
 27. Sipahimalani (2000) notes that in 1998–99, of total central government spending DPEP accounted for 20 per cent, midday meals for 51 per cent; OB 11 per cent; teacher education 6 per cent and non-formal education and other externally assisted programmes for the remainder.
 28. Ravi Srivastava (2005) notes that departments other than education contribute one-fifth to one-third of total spending on education in the centre and 12–15 per cent of total spending on education in the states. Including education spending by other departments, education spending as a share of GDP was about 4.1 per cent in 1988–89, and fell to 3.8 per cent in 1997–98.
 29. This is estimated on the basis of the ratio of teachers at each level, given that teacher salaries account for about 95 per cent of total expenditure on elementary education.
 30. Tilak (2004) argues, however, that too much cost recovery is already taking place in Indian universities. Tilak's own data suggests otherwise. Tilak presents data for the 1990s for 36 universities for their income from various sources (government subsidy, cost recovery, internal sources, and others). For 16 universities, less than 75 per cent of income, for 20 universities 50–74 per cent, and for merely four less than 50 per cent is from government subsidy. For only 15 universities does cost recovery exceed 20 per cent of the income.
 31. These states have the highest share of secondary students enrolled in private aided schools: Maharashtra has the highest share in the country at 65.5 per cent, Karnataka, 42.5 per cent (4th); Kerala, 37.6 per cent (5th); Gujarat, 36.3 per cent (6th). Only HP among the high achievers has 2.8 per cent in private aided schools.
 32. This was noted both by the PROBE (1999) team, as well as by respondents in focus group discussions in the Unicef survey.
 33. Salaries rise because teachers in private aided schools become part of the government civil service, and start receiving salaries that regular government teachers receive. Accountability decreases because like government teachers, private aided school teachers are not accountable to parents—only to higher

echelons of the government bureaucracy in a vertically-organised line ministry (education) (Kingdon and Muzammil, 2003).

34. Author's estimate based on Panchamukhi and Mehrotra (2005). Data for per capita consumption expenditure per month was taken from Planning Commission (2002).
35. These figures are an average based on costs of all kinds of schools, government, private aided, and private unaided. We have noted that naturally the costs of private unaided schools are greater to the household than government schools. The shares in rural primary schools, where the majority of schools are government ones, are (in per cent): Assam, 11; WB, 11; MP, 12; Rajasthan, 14; TN, 15; UP, 15; Bihar, 16.
36. The shares in urban primary schools are (in per cent): WB, 11; TN, 12; MP, 15; Bihar, 17; UP, 19; Rajasthan, 19; Assam, 21.
37. The shares in rural middle schools are (in per cent): Assam, 18; MP, 22; Rajasthan, 24; UP, 28; Bihar, 29; TN, 30; WB, 32.
38. The shares in urban middle schools are (in per cent): TN, 15; WB, 21; MP, 23; UP, 24; Bihar, 25; Assam, 27 and Rajasthan, 27.
39. This should not be interpreted to mean that household demand for elementary education is weak; on the contrary, all the evidence in this book suggests that not only are parents willing to pay a significant share of income for school education, but they are willing to send their children to private fee-paying schools if the government school is dysfunctional. Even though the external efficiency of the school system (that is how demand for skilled or educated labour might affect demand for schooling) is not the subject of this book, the fact that India has experienced 'jobless economic growth' during the 1990s does not seem to have visibly dampened demand for elementary education.
40. For evidence in this regard drawn from across South Asia, Latin America and Africa, see Mehrotra (2005); for evidence from Brazil, see Tendler (1997).
41. We should note, however, that this is not a subject later chapters discuss in depth. For a discussion of this subject, see Mehrotra et al. (2005).
42. See a report prepared in 2001 by Mehrotra, Panchamukhi, Ranjana Srivastava and Ravi Srivastava for Unicef and the government of India, based on this same survey. The report later became an independent book (Mehrotra et al. 2005). The proposal was further repeated in Mehrotra (2004).
43. This will exceed the loan agreement worth \$1 billion (or roughly Rs 45 billion) additional aid for elementary education, consisting of loans from the World Bank, DFID (Department for International Development, Government of UK), European Commission for a three-year period—2004–07 (Tilak, 2004).
44. In 1993, the Supreme Court, in a landmark judgement in the Unnikrishnan vs State of Andhra Pradesh case, decreed that the right to education was to be construed as a fundamental right flowing from the right to life itself, and Article 45, (defining the relevant age group as 0 to 14 years). This was to be seen as providing the parameters within which the right to education was being defined.
45. The 1993 Supreme Court judgement had defined the operational parameters of the right to education flowing from the right to life as 'up to 14 years of

age' and not '6–14 years of age'. The constitutional amendment to make education a Fundamental Right for 6–14 years has only partially fulfilled the requirement of the Constitution as interpreted by the Supreme Court of India. The inclusion of years 0–6 would guarantee full provision by the state of both primary health needs and early educational care for children up to 6 years.

46. The Tapas Majumdar Expert Committee was quite sanguine about finding the necessary finances for universal education up to the age of 16 or even 18. It did not think it will constitute any big macro-economic problem for India. The Committee (Government of India, 1999) had calculated that no more would be required for this than a modest rate of growth of the GDP (at over 5 per cent per year), and an increase in India's tax collected-to-GDP ratio from the present around 16 per cent to about 18 per cent by 1997–1998 (which will still not be the highest in Asia).
47. In the majority of Sub-Saharan countries, the mother tongue is the medium of instruction only until grade 3 in primary school, after which all instruction in all schools is in the international language. However, since the international language is taught poorly, and the school system is poorly resourced, the social segmentation between those who go to well-resourced private schools and the rest is severe (see Prah, 2003). One should note that while in Africa the international language becomes the medium of instruction in all schools after grade 3, in India English is only introduced as one language in a three-language formula (mother tongue as medium of instruction, Hindi, English), usually at the end of the primary cycle.
48. Bilingual education availability in those Latin American countries with large populations of indigenous Indians meant that language of instruction is nowhere close to being the kind of issue it is in South Asia and Sub-Saharan Africa.

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2 The Impasse Broken: Mapping Change in Elementary Education in Uttar Pradesh¹

RAVI S. SRIVASTAVA

1. INTRODUCTION

The state of Uttar Pradesh (UP), straddling northern and eastern India, covered until recently 294,000 sq. km and contained nearly 170 million people spread across 112,000 villages and numerous towns. Its population was smaller than only six other countries in the world. On 15 November 2000, 13 of the state's 83 districts were reconstituted into the new state of Uttaranchal. In terms of social indicators, the performance of districts in Uttaranchal trounces those remaining in UP. Thus, the formation of Uttaranchal will further lower UP's achievements. Much of the discussion in this chapter pertains to the undivided state.

This chapter presents an overview of the progress of literacy and elementary education in UP, focusing on the aspects of the costs and financing of education and their effects on access, equity and quality. It draws upon a Unicef survey in eight Indian states carried out during 1999–2000. Two large surveys, repeated at regular intervals, are carried out by the National Sample Survey Organisation (NSSO) on the utilisation of educational services and costs incurred by households, and by the National Council of Educational Research and Training (NCERT), which covers educational establishments. The Unicef survey was designed to cover all households in sample villages through an enumeration schedule, as well as provide in-depth coverage of sample households and educational

facilities catering to elementary education. It used a variety of instruments, including questionnaires and Focus Group Discussions (FGDs). Details of the survey are given in Appendix 2A-1.

Section 2 examines the issue of access to elementary education—literacy, enrolment, dropout and repetition—based on the Unicef survey. Section 3 compares government and private schools. Section 4 analyses the demand side, by looking at the out-of-pocket costs of schooling in government and private schools. Section 5 discusses parents' attitudes to schooling and the incentives that the government has been offering to increase demand. Section 6 examines public spending for education in general and elementary education in particular. Section 7 is devoted to government initiatives to improve schooling. Section 8 briefly discusses the resource requirements for universalising elementary education. The final section (Section 9) spells out the challenges facing the state in elementary education.

2. STATUS OF ELEMENTARY EDUCATION

Literacy Challenge

During the period 1961 to 1991, the national literacy rate moved from 24 per cent to 42.9, and the figure for UP doubled from 17 to 33 per cent. Rural literacy rates in the state have increased at a higher pace than urban rates, but a large gap between the two remains.

Female literacy has been rising at a faster rate and gender disparity has been declining. In 1991, while the national female to male literacy ratio was 60.8, this percentage was only 44.8 in UP. The gap is due to rural locations, where the female literacy rate is just over one-third of male literacy, compared to the national percentage of over one-half.

Social group disparities in literacy still continue to be very large. The census collects information on the general population and on Scheduled Castes (SCs) and Scheduled Tribes (STs). Literacy rate of the SC and ST has increased at a higher rate compared to the general population, but the deficit is still substantial, particularly for women.

During the 1990s literacy grew faster than before show a more rapid increase, with female and SC literacy rising at a faster rate

than the overall rate. By 2001, UP had achieved an overall literacy rate of 57.4 per cent (70.2 per cent for males and 43 per cent for females). In terms of growth in literacy in the 1990s, UP ranks fifth among all states and female literacy has increased at a higher rate than total literacy. However, the state still ranks 17th among 20 large Indian states, with illiteracy among women as high as three-fifths.

Access to Elementary Schooling: Enrolment

Enrolment ratios estimated from the Unicef survey shows that both Gross and Net Enrolment Ratios (GER and NER respectively) are higher for urban than for rural areas and are highest at the primary level (see Table 2.1). Further analysis of these rates shows that girls in all cases have lower GERs and NERs than boys. Enrolment ratios are highest for the upper castes. The difference between the enrolment ratios of girls and boys is also lowest for upper castes.

Table 2.1
Enrolment Ratios

<i>Enrolment Ratio</i>	<i>Classes 1 to 5</i>		<i>Classes 6 to 8</i>		<i>Classes 1 to 8</i>	
	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>
Gross Enrolment Ratio	102.57	108.52	69.87	57.24	92.95	96.17
Net Enrolment Ratio	79.10	80.00	43.30	45.46	79.80	79.89

Source: Unicef Survey, 1999–2000.

Disparity in Enrolment Across Socio-economic Groups

The Human Development Survey of the NCAER (Shariff, 1999) confirms that not only are there large differences in enrolment rates across social groups (Hindus versus Muslims, SCs versus non-SCs) in UP, these differences are also much larger than those in educationally developed states, such as Kerala and Himachal Pradesh (HP).

In 1997–98, a World-Bank-sponsored survey in two regions of UP (Bundelkhand and eastern UP) showed how educational participation among children varied quite significantly depending upon class, social and gender status. Enrolment among boys increased from 58 per cent in the lowest quintile to 74.6 per cent in

the highest quintile, while enrolment among girls increased from 35.3 per cent to 53.8 per cent in the highest quintile. Enrolment among Muslims and the SCs were among the lowest, while children belonging to high-caste groups enjoy nearly universal access to education. The largest differences were between SC girls in the lowest consumption quintile who had an enrolment rate of only 30.6 per cent and upper caste boys in the highest consumption quintile who had a more than tripled enrolment rate of 95.3 per cent.

In the Unicef survey, trends across caste groups indicate a lower enrolment for the SCs, STs and Other Backward Classes (OBC) as compared to upper castes. The OBC shows the lowest enrolment rate for both rural and urban areas and also holds the greatest differential between the enrolment of girls and boys. This indicates that OBC girls face the highest disadvantage followed by the SC, ST and upper castes. Like the gender gap, difference across all caste groups is more marked in rural areas.

The proportion of never-enrolled rural children was 15.4 per cent for the 6–13 year age group (Table 2.2). The highest proportion of never-enrolled children belonged to the OBC. The gender difference is quite high for all age groups and caste groups, although slightly lower for the upper castes. Thus, class, social group and gender variables reinforce the differing access to education. Educational policy must attempt to overcome the result of these differences.

Table 2.2
Percentage of Never-Enrolled Children to Total Children

	6–10 Years			11–13 Years			6–13 Years		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Rural	11.29	22.00	16.09	8.12	21.77	13.88	10.32	22.00	15.44
Urban	13.26	15.67	14.35	9.62	14.50	11.77	12.08	15.31	13.53

Source: Unicef Survey, 1999–2000.

Educational Efficiency: Dropping Out and Repetition

Dropouts are high in elementary education, although reliable figures are difficult to obtain due to the unreliability of school records and questionable parental recall (not distinguishing

between those never enrolled and dropping out). According to Government of India Education Department data, more than half (52.5 per cent) of enrolled children drop out between classes 1–8 (49.9 per cent boys and 57.3 per cent girls).

In the Unicef survey, dropout rates were estimated from an examination of school records for 1997–98 and 1998–99 (Table 2.3). Out of 100 children enrolled in Class 1 in government schools, only 68 in rural areas and 49 in urban areas are estimated to pass Class 5.

Table 2.3
Dropout Rates by School Management—1997–98 to 1998–99

	<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>	<i>Class 4</i>	<i>Class 5</i>	<i>Class 6</i>	<i>Class 7</i>	<i>Class 8</i>
<i>Rural</i>								
Government	7.42	6.50	8.60	9.71	3.20	4.51	2.66	0.80
Private	10.92	4.04	5.51	3.73	4.29	6.03	17.83	12.40
<i>Urban</i>								
Government	19.32	13.65	15.03	12.35	6.18	3.29	5.25	1.62
Private	7.72	5.13	5.91	4.62	2.96	4.14	1.75	1.39

Source: Unicef Survey, 1999–2000.

In the rural areas, the proportion of dropouts for all age groups is highest among the SCs and STs, followed by the OBC and the upper castes. However, in urban areas, the overall proportion of dropouts is slightly higher for the OBC as compared to the SC and ST. In the urban 11–13 year age group, SCs and STs had the highest proportion of dropouts.

Despite automatic promotions in early primary classes, the repetition rates later are high and inefficient. In rural areas, the overall repetitions were highest among the upper castes followed by the SCs, STs and the OBC. In urban areas, repetitions were highest for the OBC, followed by the upper castes, SC and ST. However, the trend for classes above 5 was different, with the lowest repetitions for the upper castes, followed by SCs, STs and then OBC. The difference between the repetition rates for boys and girls did not show any trends across caste groups.

Three major trends emerge from the analysis of the figures on enrolment, dropouts, proportion never enrolled and repetition rates:

- Children in rural areas face a greater disadvantage in attaining basic education.
- Among caste groups, children of the lower castes and backward castes face a greater disadvantage in education. This difference is more pronounced in rural areas.
- The bias against the girl child is reflected in every indicator of basic education both in rural and in urban areas. The neglect of girl's education is greater in rural than in urban areas. Among caste groups, girls face a greater disadvantage in lower and backward castes as compared to the upper castes, though the disadvantage exists in all caste groups. Low/backward caste girls in rural areas are therefore the most educationally disadvantaged in UP.

3. PRIVATE AND PUBLIC SCHOOLS

In this section, we use the Unicef survey data to analyse further some of the issues around access, retention and quality in UP—but now distinguishing between government schools and private schools.

Enrolment, Retention and Regularity of Attendance by School Management

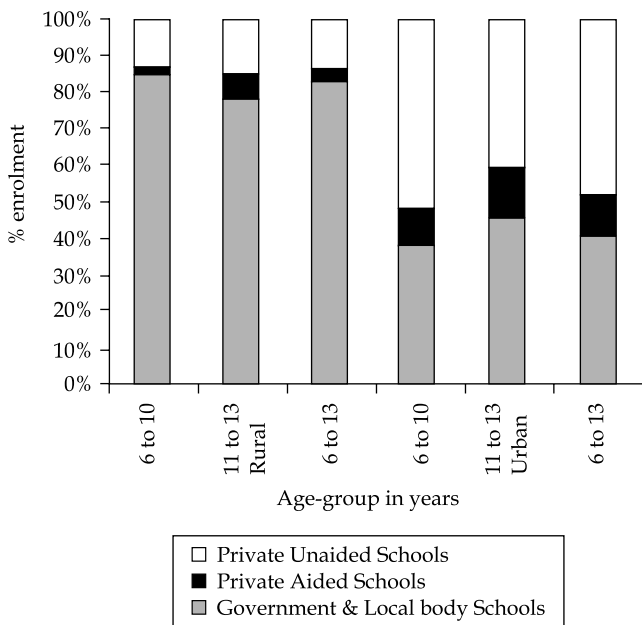
A total of 83 per cent of children in the 6–10 years age group were enrolled in schools managed by the government and local bodies, and 15 per cent were in private unaided schools (see Figure 2.1). The remainder were in private aided schools. In the age group of 11–13 years, the proportion in private schools increased as government school figures declined from 85 to 77 per cent. On an average, enrolment was similar for both boys and girls. A greater proportion of SC/ST children were in government schools as compared to other castes, with the highest proportion for the OBC, followed by the upper castes.

In the urban areas, more children were enrolled in private unaided schools (49 per cent) than in government schools (39 per cent) and private aided schools (11 per cent). The difference in the proportional enrolment between the private unaided schools and government schools is higher regarding the 6–10 years age group

than the 11–13 years age group. A larger proportion of boys than girls were enrolled in private unaided schools. Enrolment in private unaided schools was highest for upper castes, followed by the OBC and the SC/ST. The latter had the highest enrolment in government schools. The trend in private aided schools was the same as that of private unaided schools.

Figure 2.1

Per Cent Enrolment by Management to Total Enrolment in Formal Schools



Dropout and Repetition Rates in Government and Non-government Schools

The proportion of dropouts from 1997–98 to 1998–99 shows that the rates were slightly higher in Class 1 for private schools than for government schools in rural areas (Table 2.3). In the urban areas, the overall dropout rate is much higher in government schools than in private schools. The dropout rate for girls is lower than boys for all grades in rural areas, other than Classes 5 and 6 for private and government schools, respectively. In urban areas,

girls have a consistently lower dropout rate in government schools, while the pattern is reversed for private schools.

Repetition rates are higher for government schools compared to private ones in both rural and urban areas (Table 2.4). The rates in urban areas decline after Class 5 in government schools and fall below that of private schools rates. Girls have higher repetition rates for both types of schools in rural as well as urban areas, though the margin of difference is lower in urban areas.

Table 2.4
Repetition Rates by School Management—1997–98 to 1998–99

	<i>Class 1</i>	<i>Class 2</i>	<i>Class 3</i>	<i>Class 4</i>	<i>Class 5</i>	<i>Class 6</i>	<i>Class 7</i>	<i>Class 8</i>
<i>Rural</i>								
Government	7.70	5.85	3.20	3.19	2.81	1.47	0.46	13.68
Private	0.41	0.00	0.19	0.98	0.00	0.20	0.31	9.59
<i>Urban</i>								
Government	17.76	5.87	4.46	4.44	3.38	0.51	0.26	0.00
Private	4.31	1.69	8.23	6.73	1.73	0.67	2.96	0.69

Source: Unicef Survey, 1999–2000.

Attendance Regularity

Attendance regularity was judged by the response to the question 'How often does your child go to school?' in the sample survey of households. The responses varied from 'daily' and 'on most days', to 'occasionally' and 'never'. In both rural and urban areas, there was marginally greater regularity in attending private schools as compared to government schools (Table 2.5). All responses in the case of private schools were in the 'daily' or 'on most days' categories, while government schools got 5 per cent responses in the 'occasionally' category.

In general, upper-caste children showed greater regularity. By income groups, attendance was more regular for lower- and middle-income groups as compared to high-income group. Girls attended less regularly than boys in both rural and urban areas.

The survey also verified actual attendance in schools through school visits and compared these to the number of students on registers and the numbers marked present. In both government and private schools, a larger percentage of students were marked

Table 2.5
Enrolled Students Recorded Present and Found Attending on Verification

As Per Record on the Day of Visit as Per Cent of Enrolment								
	1	2	3	4	5	6	7	8
Management			Rural					
Government School	65.19	73.27	80.98	90.46	85.63	80.00	100.18	75.54
Private Total	82.53	73.46	84.23	76.97	73.73	85.33	92.11	92.43
Nature of Institution								
Recognised	67.50	73.90	82.10	89.67	86.65	85.19	101.42	78.39
Not Recognised	78.72	66.79	75.82	69.33	57.26	75.95	80.21	105.83
Total	68.56	73.30	81.55	87.36	82.19	82.74	96.04	84.20
Management			Urban					
Government School	81.24	75.74	93.80	97.38	103.56	87.08	98.09	71.35
Private Unaided	100.16	95.11	112.85	111.66	95.71	94.85	100.52	99.35
Nature of Institution								
Recognised	89.30	84.28	102.23	106.02	100.00	89.88	99.22	82.58
Not Recognised	103.39	89.24	115.86	97.58	92.31	100.00	100.00	100.00
Total	90.75	84.76	103.58	105.06	99.10	91.01	99.34	83.84
As Per Head Count on the Day of Visit as Per Cent of Enrolment								
Management			Rural					
Government School	50.06	57.61	67.25	77.09	77.11	70.40	83.88	68.12
Private Total	69.20	61.31	70.12	61.62	60.17	75.34	78.04	78.14
Nature of Institution								
Recognised	51.87	57.54	67.64	74.23	75.11	72.91	83.71	65.06
Not Recognised	71.99	65.68	68.85	68.07	56.05	73.02	72.57	103.75
Total	53.78	58.22	67.75	73.53	72.22	72.94	80.88	73.26
Management			Urban					
Government School	75.76	73.61	87.51	94.65	97.04	85.65	97.00	70.83
Private Unaided	93.73	108.56	108.68	111.25	96.38	94.61	90.13	118.12
Nature of Institution								
Recognised	85.81	90.43	98.25	104.53	96.66	88.68	98.59	82.12
Not Recognised	75.98	84.72	99.56	96.14	96.70	102.13	65.22	218.00
Total	84.79	89.88	98.38	103.57	96.67	90.18	93.48	91.92

Source: Unicef Survey, 1999–2000.

present than found to be attending at the time of verification. This difference was found to be larger in rural areas compared to urban areas.

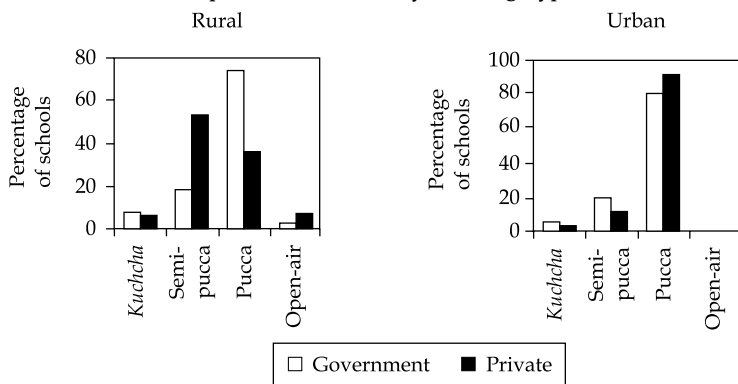
The percentage of students actually attending school was only 50 per cent in the case of Class 1 students in government schools in rural areas (Table 2.5). In private schools, this percentage was found to be 69 per cent. Similarly, in all the lower Classes (1–3), a much smaller percentage of students were found to be in actual

attendance in government schools. However, after Class 4, the difference in actual attendance between the types of schools was not systematic.

School Infrastructure

Most private schools have better physical infrastructure than government schools (Table 2.6). While most government schools were established more than 10 years ago, private schools are on average younger. A greater proportion of government schools had *pucca* buildings compared to private schools, though the difference was lower in urban areas (Figure 2.2). Approach roads to rural schools were mostly *kuchcha* or semi-pucca for both private and government schools, although the proportion of semi-pucca roads for private schools was higher at the primary level. All urban schools had pucca approach roads. Around 89 per cent of rural and 90 per cent of urban private schools had more than three rooms at elementary level, compared to 34 per cent of rural and 51 per cent of urban government schools.

Figure 2.2
Proportion of Schools by Building Type



Average area was greater for private schools than government schools in rural areas, with 99 per cent of private schools having an average area of more than 200 square feet as compared to 93 per cent government schools. The trend was same in urban areas with 77 per cent private and 71 per cent government schools having an area of more than 200 square feet.

Private schools also had greater number of schools with more than three teachers as compared to government schools in both rural as well as urban areas (Table 2.6).

In terms of water supply, toilet and playground facilities, government schools fared better than private schools, especially in rural areas. While a greater proportion of government schools had a water supply in rural areas, the pattern reversed in urban areas. Similarly, a greater proportion of government schools had playgrounds in rural areas, while the pattern was reversed in urban areas. However, on an average, private schools had larger playgrounds than government schools in both rural and urban areas.

Thus the difference in overall school infrastructure between private and government schools is more pronounced in urban than in rural areas. In rural areas, government and private schools do not show much difference in infrastructure. In fact, the former is often better than the latter. But in urban areas, private schools decisively have a better infrastructure as compared to government schools.

Enrolment in government and private schools is also affected by the quality of teaching. Hence, teaching-specific indicators are important to analyse the overall performance of the schools.

Student–Teacher Ratio

Student–Teacher Ratio (STR) is one of the main indicators of the adequacy of the learning process (though not outcome). The STR for rural primary schools was 67, compared to the urban primary STR of 32. The STR difference based on school management is marginal at the primary level for rural schools, but increases greatly at the upper primary level. Government schools have a better STR for both schools in urban settings, and for upper primary schools in rural areas (Table 2.7).

Teacher Qualification, Training Status and Vacancies

Forty per cent of government schools in rural areas employ graduate qualified teachers, compared to only 23.5 per cent of private schools. However, in urban areas the situation is reversed with 100 per cent of private schools employing graduate qualified teachers as compared to 82 per cent government schools.

Table 2.6
Infrastructure in Private and Government Schools by Levels of Schooling

		Percentage Schools with											
		Pucca Building		> 3 Rooms		> 3 Teachers		Toilet Facilities		Drinking Water Facilities		Playground	
		R	U	R	U	R	U	R	U	R	U	R	U
Primary	Govt	70.7	80.6	23.2	47.2	12.1	36.1	48.3	50	91	89	41.4	44.4
	Private	25	86.2	43	86.2	37.5	90	25	100	87.5	97	25	62.1
Upper Primary	Govt	86.7	75	73.3	62.5	40	75	53	50	93.3	100	0	75
	Private	50	75	100	100	100	100	50	100	75	100	50	100
Elementary	Govt	0	0	0	100	80	100	100	0	100	100	0	0
	Private	40	100	80	100	100	100	40	85	100	100	100	57.1
Total	Govt	74	78	34	51	18	44.4	49.3	66.6	91.8	91	42.5	49
	Private	35	87.5	89	90	67.4	92.5	35	97.5	89	97.5	41.2	65

Source: Unicef Survey, 1999-2000.

Table 2.7
Student-Teacher Ratio by School Management

Type of School	Rural		Urban	
	Primary	Upper Primary	Primary	Upper Primary
Government	73.46	33.90	39.73	21.76
Private	70.14	105.59	61.91	60.35
Total	66.56	39.06	32.35	25.66

Source: *Unicef Survey, 1999–2000.*

The pattern of qualification of teachers shows that most primary school teachers have passed class 12; while at upper primary and elementary levels they are mostly graduates and postgraduates. The trend is the same for both rural and urban areas, as well as for both government and private schools.

Among the respondents, 80 per cent of government school-teachers at the primary level were trained in both rural and urban areas. For private schools, 20 per cent in rural and 27 per cent in urban areas were trained. At the upper primary level, the proportion of trained teachers was 76.5 per cent and 84.4 per cent for government schools in rural and urban areas respectively; the same for private schools being 52.6 and 59.1 per cent respectively. At the elementary level, 100 per cent of government teachers were trained as compared to 65.6 per cent of private teachers in rural and 64 per cent in urban areas. On the whole, government schools had a much higher proportion of trained teachers in both rural and urban areas.

A higher proportion of trained teachers were females in both private and government schools at all levels in urban areas, with more female teachers in government schools. It was the opposite in rural areas.

The number of vacancies in teachers' posts is lower for private schools than government schools. In general, sanctioned posts as well as vacancies are greater for lower levels of education. The pattern is the same in both rural and urban areas.

By appointment status, a greater proportion of permanent appointments are in government schools (90 per cent) among both males and females in rural and urban areas. In the case of private schools, however, many teachers have only temporary status.

Background of Teachers

The gender distribution of teachers shows that in rural areas there is a greater proportion of female teachers in government as compared to private schools, while there are more females in private schools for urban settings. A much higher proportion of male teachers exist in rural areas as compared to urban areas (Table 2.8). In terms of caste composition, there is a greater proportion of upper-caste teachers in both rural and urban areas for government as well as private schools, followed by OBC and SC/ST.

Table 2.8
Gender Distribution of Teachers (percentage of teachers responding)

Level of School	Type of management	Rural		Urban	
		Male	Female	Male	Female
Primary	Government	71.7	28.3	48	52
	Private	70	30	24	76
Upper Primary	Government	66.7	33.3	29.4	70.6
	Private	94.7	5.3	59.1	40.9
Elementary	Government	0	0	62.5	37.5
	Private	75	25	59.1	40.9
Total	Government	70.4	29.6	45.1	54.9
	Private	77.7	22.3	28.7	71.3

Source: Unicef Survey, 1999–2000.

Proportion of Teachers with Type of Activity and Frequency

The Unicef survey also reveals that in rural areas at the primary level, a higher proportion of private school teachers met parents on a monthly, rather than weekly, basis, while the pattern in government schools was just the opposite. Similarly, a lower proportion of private school teachers discussed the results of class performance with head teachers as compared to government schoolteachers. The pattern is different in upper primary level with most private school teachers meeting parents individually on either weekly or monthly basis as compared to government schoolteachers.

At the elementary levels, government schools do not show any parent–teacher interaction while the majority of private schools report at least monthly interaction. In urban areas, private school teachers show higher participation in such activities as compared to government schoolteachers. The proportion of private school teachers taking part in such activities increases with increasing levels of education, while it declines in the case of government school teachers in both rural and urban areas.

Additional Training and Support Required by Teachers

Teachers were asked questions about their training needs. In rural areas, a greater proportion of private teachers admitted needing training at all levels, with 100 per cent at upper primary level. In general, maximum training was required in teaching methods, followed by training on subject matter, and its presentation and communication.

Teachers were also asked about additional support (other than training) that they needed. At the primary level in urban areas, government teachers required greater support for preparation of new/improved lesson plans and new teaching method. Private teachers required greater help in handling slow learners and children with various capabilities, upgrading subject knowledge and assessing student performance. In rural areas, private teachers rather than government teachers required greater additional support, with the trend reversed in urban areas.

Table 2.9
Percentage Teachers Requiring Additional Support

<i>School Management</i>	<i>Rural</i>	<i>Urban</i>
Government	83.61	76.47
Private	76.92	68.97

Source: Unicef Survey, 1999–2000.

Teacher Perception Regarding Quality and Methods of Teaching

Information on the use of teaching aids showed that the most highly used teaching aid was the textbook, followed by maps, posters, guide books, word meaning books, science and other kits,

flash cards and others. Government teachers as compared to private teachers in both rural and urban areas reported a higher usage of teaching aids. At the upper primary level, the use of teaching aids is higher amongst private teachers. A greater use of textbooks was reported in private than in government schools in rural areas. In urban areas greater use of textbooks was reported by government schools at primary and elementary levels than at upper primary levels. The use of other prepared materials was greater in private than in government schools at all levels.

Parent–Student Interaction with Schools

Parent–student interaction regarding the quality of studying involves issues such as the amount of homework received, checking and supervision of studies by parents and teachers, time spent on studies at home, and the attendance attitude of students. These questions reflect the overall level of involvement of children in studies, as well as the level of supervision at home and in school.

Private schools gave more homework than government schools on a daily basis in urban areas, while the trend was similar in rural areas. A greater percentage of parents reported daily checking of work for private schools in both rural and urban areas. Parental checking of work was higher in urban than in rural households. Time spent studying at home was higher for private schools as compared to government schools in both rural and urban areas.

Overall attendance showed a similar pattern in rural areas for both government and private schools. Girls attended less often than boys, with the difference being greater in private schools. In urban areas, higher attendance was reported for private schools, especially in the lower three classes.

Perception about Teaching and Teacher Attendance

Greater regularity in teacher attendance was reported in private schools than government schools in both rural and urban areas. Regarding parent perception about teaching, a greater percentage of parents reported teaching in private schools as ‘good’ and ‘satisfactory’ as compared to government schools, though the margin is small. In rural areas, maximum satisfaction was expressed for

private teaching, especially in private aided schools, followed by private unaided schools and government schools.

Teacher performance and accountability has also been a matter of concern, with government strategies focused on many dimensions of the problem. A major non-governmental report (PROBE, 1999) has revealed a number of significant shortcomings leading to lower student and parental motivation and poor learning quality. Apart from infrastructure issues and high student–teacher ratios, schools are able to function only about 150 days in a year and teaching effectively takes place for about two hours per day. The low level of teaching activity is the fundamental flaw in the schooling system (*ibid.*: 47). In single teacher schools, the teacher's main preoccupation was to maintain a semblance of order in the classes.

The Unicef survey also examined issues relating to teacher attendance and student attendance. The former was done both through Focus Group Discussions (FGDs) and by recording the number of days a teacher had to be absent for non-teaching duties. The latter was done through physical verification at the schools. Irregular hours or absenteeism was reported on the part of teachers in a number of locations. At the same time, teachers themselves reported a heavy burden of official duties outside school. In the FGDs, teachers were considered to be regular only in 35.2 per cent of cases. The community also had a poor assessment of the quality of teaching (satisfactory or good in only 40.4 per cent of cases).

4. COST OF SCHOOLING IN PRIVATE AND GOVERNMENT SCHOOLS

Overview

The dissatisfaction with the government school system is not only on account of teacher absenteeism and general poor quality. The costs that parents have to bear seem to be an additional factor. This section analyses the household expenses on various levels of education. The Directives Principles of the Constitution, the Convention on the Rights of the Child (CRC) as well as the Declaration on the Right to Development, to which the Government of India

is a signatory, provide a framework for questions concerning the access to and cost of education. Both the Constitution (as interpreted by the Unnikrishnan judgement of the Supreme Court) as well as international treaties and conventions lay down specific obligations to be met by the Indian government with respect to the different levels of education. These issues are also, in turn, linked to the debate on the public/private good character of the levels of education.

On the basis of evidence gathered through several large-scale surveys (NSSO, 1993; 1998; NCAER [National Council of Applied Economic Research], UNICEF, 1999) all levels of education throughout the country are associated with household costs. UP data based on the NSSO 52nd Round (1995–96), is shown in Table 2.10.

Table 2.10
Annual Costs of Education in UP and Comparison
with Per Capita SDP and Daily Wages

<i>Education Level</i>	<i>Average Annual Cost Per Student (Rs)</i>		<i>Cost as % of SDP Per Capita</i>		<i>Cost as Multiple of Daily Wage</i>	
	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>
Primary	321	1412	5.5	24.0	12.8	35.3
Middle	689	1803	11.7	30.7	27.6	45.1

Source: NSS 52nd Round (Computed) & Directorate of Economics and Statistics, GOUP.

Primary education is associated with an annual per student cost of Rs 321 in rural areas, and a substantially higher cost of Rs 1,412 in urban areas. These costs rise with successively higher levels, although at each level the costs borne per student are lower in the rural areas.

A comparison of these costs with State Domestic Product (SDP) per capita and daily wage rates of unskilled workers in 1995–96 is also presented in Table 2.10. At the primary level, the unit costs in rural and urban areas are 5.5 per cent and 24 per cent, respectively, of the per capita income. They also represent 13 and 35 times the daily wage rate in rural and urban areas, respectively. At the upper primary level, unit costs are 12 per cent and 31 per cent of per capita income in the rural and urban areas, respectively.

As multiples of daily wage rates, unit costs are 28 and 45 times the daily wages.

The contribution of different components to education costs shows that, at the primary level, the share of fees in total cost is surprisingly quite high at 28.5 per cent in rural areas and 42.2 per cent in urban areas. At the upper primary level, the share of fees to total cost is 20.9 per cent in rural areas and 31.8 per cent in urban areas. Close to 20 per cent of the total cost at the elementary level in both rural and urban areas is on uniforms, which is not directly related to educational performance. The itemised cost information has been grouped into school development fees, other school fees, books/stationery and other related expenditure (Figure 2.3). The bulk of expenditure was for 'other school-related fees', followed by expenditure on books/stationery, school development fees and other school-related costs for both rural and urban areas.

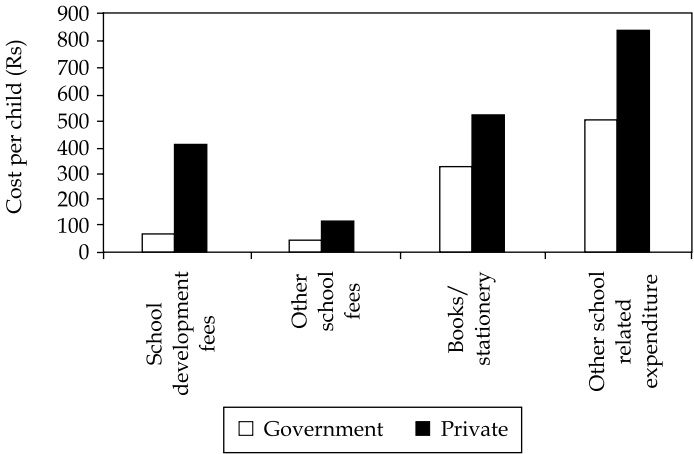
Faced with different types of schooling costs, households make schooling decisions based on their economic circumstances and the value they place upon education. Parents appear to opt for smaller investments in girls' education even at these levels. These results hold for most of the regions across the two levels of education and urban/rural areas, although there are a few exceptions.

The amount spent on the education of an SC or ST student is invariably less than what is spent for other students, at both levels of education, in urban as well as rural areas. The gap in difference is much larger in urban areas. For example, an SC/ST student spends, on average, Rs 818 on urban primary education compared to Rs 1,525 for other students. At the urban upper primary level, SC/ST students spend Rs 1,159, compared with Rs 1,886 spent by others (Table 2.11).

Across quintile groups, differences are very large at all levels, but again higher in urban areas. A student in rural UP in the highest quintile at the primary level spends over three times as much as a student in the lowest quintile and about twice as much at the upper primary level. In comparison, an urban student in the highest quintile spends nearly eight times as much on primary education as an urban student in the lowest quintile, and about seven times at the upper primary level (Table 2.11).

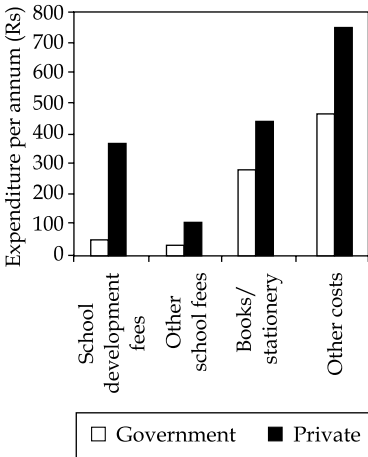
These costs have led to highly differentiated schooling strategies between boys and girls, socially deprived groups and others, and

Figure 2.3
Average Household Cost Per Child on Elementary Education

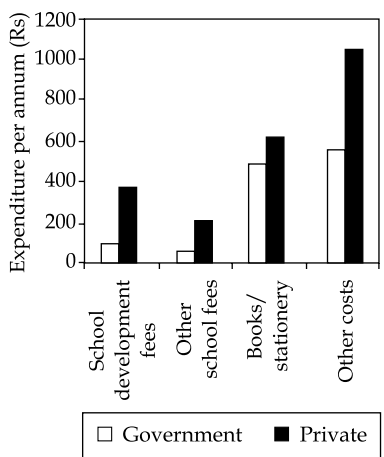


Heads of expenditure

Primary Level



Upper Primary Level



different economic strata. This market failure in the provision of education necessitates effective public policy intervention.

The Unicef survey showed schooling costs were higher for private than for government schools. For primary schooling in rural areas, children in private aided schools had to bear the highest

Table 2.11
Per Student Cost of Education by Gender,
Social Group and Consumption Quintile, 1995–96

<i>Sex</i>		<i>Social Group</i>		<i>Per Capita Expenditure Quintile</i>					
<i>Male</i>	<i>Female</i>	<i>SC/ST</i>	<i>Others</i>	<i>Poorest</i>			<i>Richest</i>		
Rural/Primary									
338	293	241	349	210	261	268	397	747	
Rural/Upper Primary									
697	668	572	720	446	563	646	744	1,053	
Urban/Primary									
1,487	1,323	818	1,525	557	771	1,399	1,968	4,127	
Urban/Upper Primary									
2,005	1,566	1,159	1,886	764	983	1,302	1,896	4,272	

Source: NSS 52nd Round (computed).

costs of Rs 1,798 per child, while the cost in private unaided schools was only slightly lower at Rs 1,660 per child. The cost of government schooling was half as much at Rs 811 per child. This cost is about 20 to 25 days (nearly a month) of annual wages. In the urban areas, the cost of education was of a similar magnitude. The average cost per child was Rs 1,441 in private aided schools and Rs 2,001 in private unaided schools. In government school, the cost was marginally higher than in the rural areas at Rs 847 per child.

Upper primary education is more expensive for children, for all types of schools. In rural areas, the cost borne by students was Rs 2,194 and Rs 2,059 in private aided and unaided schools, respectively, while the cost in government schools was Rs 1,292. In urban areas, the cost structure is again similar, but education is more expensive in both aided and unaided private schools. The average cost borne by students in these schools was estimated to be Rs 2,610 and Rs 2,766 respectively. The cost of educating a child in a government school was Rs 1,233.

Patterns of expenditure across occupation categories showed the lowest expenditures for skilled workers, self-employed, agricultural labour and farmers, and the highest expenditures by business class and professionals. This is true in both rural and urban areas. In rural areas, expenditure on girl's education was much lower for the business and professional class. The pattern was reversed in urban areas.

Government and Private Schools

From the analysis of numerous factors regarding government and private schools in the preceding sections, the following principal inferences can be drawn:

- Private schools have a definite advantage over government schools in urban areas regarding student enrolment, level of infrastructure, and overall performance. The distinction in rural areas is marginal.
- Education in private schools is much more expensive than in government schools in both rural and urban areas. Increasing popularity of private schools may be attributed to the better infrastructure and quality of education they provide.
- While private schools seem to better fulfil the efficiency criterion, the government schools serve the goal of equity to a much greater extent than private schools. In rural areas government schools have a greater availability and cater to a larger section of the population. Private schools are concentrated in urban areas in order to find a greater market for their services. The lower cost of schooling in government schools makes them more accessible to poorer sections of society.

5. ATTITUDES TOWARDS SCHOOLING AND INCENTIVES

The Unicef survey provided us information regarding prevailing attitudes towards educating children, which can be summarised as follows:

- While a job is the central concern for sending boys to school, girls are schooled for character and personality formation.
- The preferred jobs for boys vary from clerical and professional work to skilled labour. The overwhelming majority of girls are expected to do housework. This reflects the low preference for female employment. The average desired level of education is greater for boys as are greater career expectations.

- Among reasons for not enrolling children or for dropouts is participation in wage labour and other economic activities for boys, and attending to domestic chores and caring for siblings for girls.

Though based on a sample study, this analysis clearly brings out the different motivations behind educating boys and girls among the people and the reasons lying behind the patterns of enrolment and dropouts as observed by earlier data.

Incentives provide significant motivation among households to send children to school. The specific incentives that have been offered to students include tuition waivers (freeships), stipends/scholarships, free textbooks/stationery, free meals, free uniforms/shoes (Table 2.12).

Since 1995–96, the distribution of incentives has steadily expanded. The midday meal scheme, under which students are given a dry ration of 4 kg a month with an attendance rate of 80 per cent or more, has been universalised. All SC/ST students and all girls are eligible for stipends. Free textbooks were introduced under externally aided programmes and under a government directive in 2002; all SC/ST students are eligible to receive free books till class 8. The Unicef survey reports an improved coverage under one scheme (scholarships), principally for SC/ST students (Table 2.12).

Both household interviews and the focus group discussions revealed a high degree of dissatisfaction among parents and the community regarding the distribution of incentives. Table 2.13 shows the perceptions regarding scholarships and other incentives (midday meal, textbooks and so on). Scholarships were available regularly to about 74 per cent of the rural recipients and about 81 per cent of the urban recipients, but 82 per cent of households in rural areas and 51 per cent in the urban areas expressed dissatisfaction with the quality of the other incentives. Only 13 per cent of the village FGDs reported satisfaction regarding the distribution of incentives while 87 per cent reported the situation to be unsatisfactory or very unsatisfactory.

Thus, although incentives do play an important role in offsetting opportunity costs and motivating parents to send children to school, the state of affairs regarding their distribution is far from satisfactory.

Table 2.12
Percentage of Children in the Primary Grades Receiving Incentives

Caste	Books		Midday Meal		Scholarship		Attendance Money		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
<i>Rural</i>									
ST+SC	6.76	12.28	9.46	7.02	52.70	68.42	35.14	38.60	36.64
OBC	3.15	1.52	1.57	9.09	4.72	9.09	37.01	31.82	35.23
Others	3.08	3.81	5.38	7.62	6.15	8.57	28.46	25.71	27.23
All	3.93	5.26	4.83	7.89	16.01	23.68	33.23	30.70	32.20
<i>Urban</i>									
ST+SC	0.00	0.00	10.77	16.67	29.23	29.63	18.46	12.96	15.97
OBC	0.00	1.61	1.20	8.06	14.46	8.06	12.05	6.45	9.66
Others	0.00	0.00	0.00	0.00	8.57	11.11	0.00	8.33	4.23
All	0.00	0.66	4.37	9.21	18.58	16.45	12.02	9.21	10.75

Source: Unicef Survey, 1999-2000.

Table 2.13
Percentage of Households Reporting
Satisfaction/Dissatisfaction with Incentives

<i>Caste</i>	<i>Rural</i>				<i>Urban</i>			
	<i>Is Scholarship Available Regularly</i>		<i>Are You Satisfied with Quality of Incentives</i>		<i>Is Scholarship Available Regularly</i>		<i>Are You Satisfied with Quality of Incentives</i>	
	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>
SC+ST	87.16	12.84	34.57	65.43	90.91	9.09	58.14	41.86
OBC	42.86	57.14	15.12	84.88	64.00	36.00	41.38	58.62
Others	45.16	54.84	5.81	94.19	69.23	30.77	33.33	66.67
Total	73.29	26.71	18.18	81.82	80.65	19.35	48.81	51.19

Source: Unicef Survey, 1999–2000.

6. PUBLIC RESOURCES FOR EDUCATION

Expenditure and Revenue Mobilisation

Since education is a state subject, state funds support it with occasional nationally-sponsored schemes. External assistance has also significantly contributed to the growth of educational expenditure.

The expenditure on education is classified under two heads: revenue expenditure (operational expenditure), and capital expenditure. Close to 99 per cent of educational expenditure in UP is in the form of revenue expenditure. However, capital expenditures often made from ad hoc grants to educational institutions (or, as in recent years, from the Department of Rural Development Schemes), are not captured well by the present classification.

Further, all expenditure is also divided into plan and non-plan expenditure, reflecting investment/expenditure on new schemes and maintenance/current expenditure on old schemes, respectively. In general, expenditure on schemes in the plan from the first round is subsequently transferred to the non-plan side, but there are some schemes that continue to be shown as plan.

A number of departments, other than the education departments, also spend on education at the state level, including the GOI and GOUP Ministries of Social Empowerment, Rural

Development, Agriculture and Ministry of Labour. Educational expenditures are also provided either through national schemes like 'Joyful Learning' or state programmes like the Basic Education Project.

Public Expenditure on Education: UP and Other States

There is no systematic pattern across states in the level of resource mobilisation for education (Tilak and Sudarshan, 2000, Srivastava, 2005a). Srivastava (2005a) has shown that on average, educationally-poor states show a higher level of fiscal effort compared to educationally-developed states. Real educational deprivation is in the low level of per capita or per child expenditure on education, which reflects an inadequate educational infrastructure.

The broad inter-state pattern in educational expenditure is captured in Table 2.14. In terms of the fiscal effort measured by the share of elementary/total education expenditure to the state budget and the state income, as well as the share of elementary education in total education expenditure, UP's rank is close to the average. In terms of the per capita expenditure on elementary education and on total education, the state is ranked very low—15th of 16th states.

Trends in Revenue Expenditure

After allowing for inflation, real education expenditure in UP declined between 1991–92 and 1995–96 and thereafter registered an increase (a rate of less than 1 per cent) between 1990–91 and 1996–97. These were among the lowest growth rates registered by Indian states during the 1990s (Bashir, 2000). Using alternative deflators such as the SDP deflator or the public administration deflator also show low rates of growth—lower than the 2 per cent annual increase assumed on account of annual rise in teacher salaries (ibid.). These trends in the early 1990s have triggered a debate on the impact of structural adjustment on state expenditure. However, expenditure trends are now available till 2001–02 and are used here to re-examine these issues in detail. The data analysed here relate roughly to a 25-year period (1975–76 to 2001–02) (Figure 2.4).

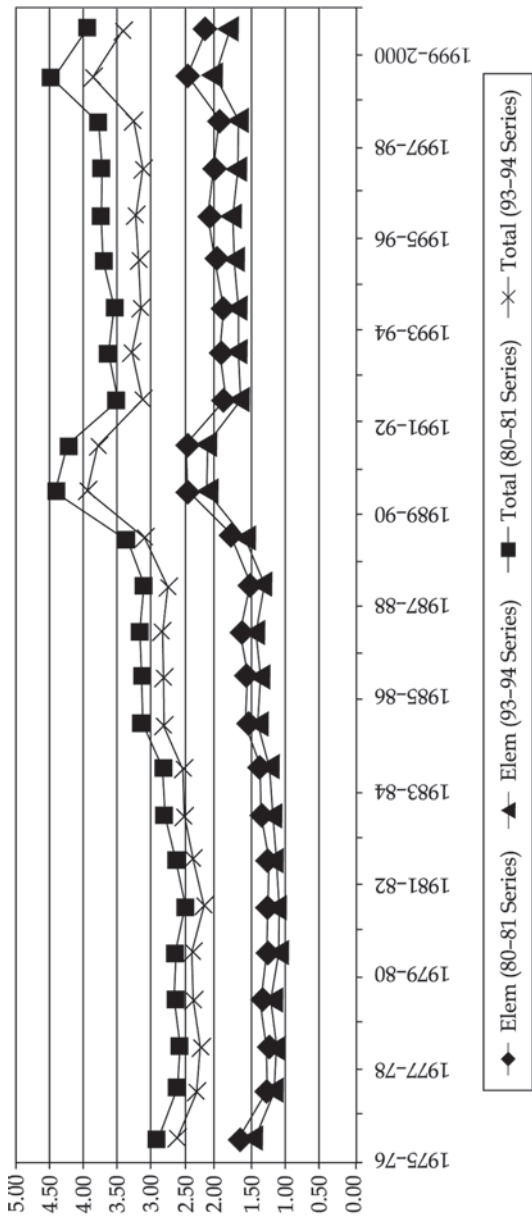
Table 2.14
Revenue Expenditure on Education by States, 1996-97

State	As % of Budget		As % of State Income		Per Cap. Exp. on		Plan Exp. as % of Tot.		% of Edu. Exp. on Elem. Edu.
	Elem. Education	Total Education	Elem. Education	Total Education	Elem. Education	Total Education	Elem. Education	Total Education	
Andhra Pradesh	5.92	13.44	1.04	2.37	12.01	27.26	11.04	6.56	44.04
Assam	17.23	28.26	3.33	5.47	25.18	41.31	27.99	32.06	60.94
Bihar	17.87	26.93	2.89	4.35	15.15	22.82	3.11	2.87	66.37
Gujarat	10.61	19.72	1.45	2.69	23.81	44.26	3.46	4.50	53.80
Haryana	5.26	10.86	1.13	2.34	19.10	39.46	13.67	16.91	48.40
Himachal Pradesh	10.69	18.79	3.60	6.34	40.94	71.98	30.25	32.81	56.88
Karnataka	9.55	18.16	1.54	2.92	20.01	38.04	21.86	20.13	52.61
Kerala	11.04	23.33	1.84	3.88	24.62	52.03	1.75	5.47	47.32
Madhya Pradesh	9.89	16.17	1.73	2.82	15.46	25.29	13.58	17.85	61.13
Maharashtra	9.23	20.16	1.19	2.60	22.01	48.09	11.34	10.89	45.78
Orissa	11.36	20.59	2.51	4.55	17.06	30.90	10.53	31.89	55.20
Punjab	4.50	14.73	0.77	2.52	14.03	45.97	0.56	10.98	30.51
Rajasthan	12.99	23.29	2.20	3.95	21.96	39.37	22.80	21.35	55.77
Tamil Nadu	8.87	18.91	1.40	3.00	19.67	41.94	7.15	5.81	46.89
Uttar Pradesh	11.09	19.90	1.76	3.16	13.67	24.54	13.52	10.85	55.73
	(5)	(8)	(7)	(8)	(15)	(15)	(7)	(10)	(6)
West Bengal	7.48	22.99	1.05	3.22	10.48	32.24	2.43	3.32	32.51

Source: GOI, various years.

Note: Figures in brackets represent rank of UIP among states.

Figure 2.4
Expenditure on Elementary and Total Education as % of GDP



Source: GOI, 1999a, various years; Government of Uttar Pradesh, various years.

Note: SDP estimates are from the Central Statistical Organisation.

Expenditure in Relation to State Revenue Expenditure

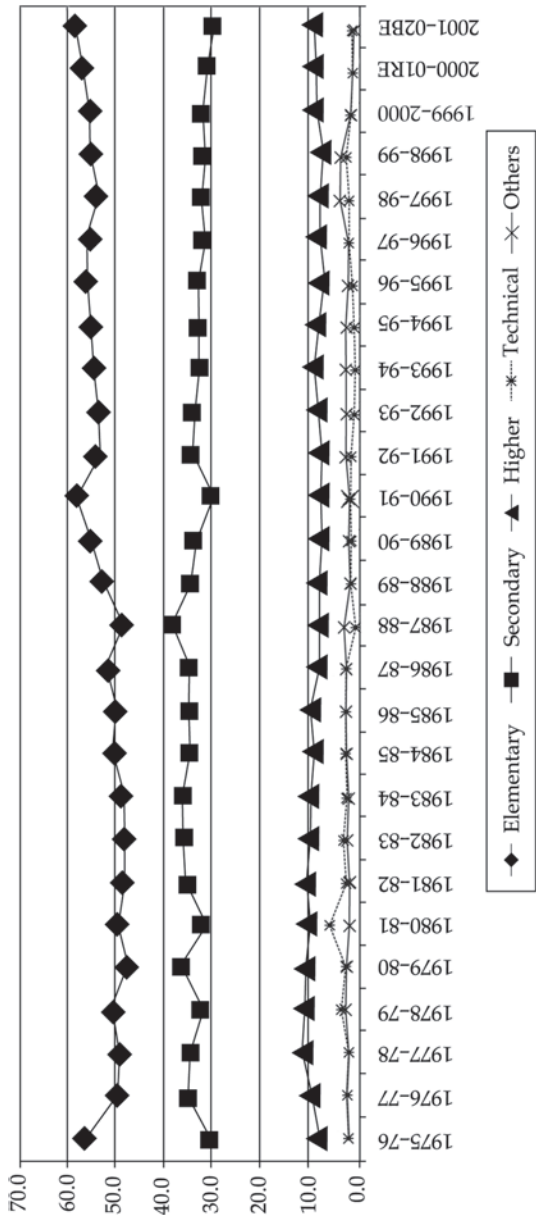
The share of elementary education and total education in the state budget appears to have fluctuated around 10 per cent and 20 per cent respectively over the entire period (Figure 2.5). The share of basic and total education expenditure in total revenue expenditure (including technical education) was at a peak at the beginning of the period studied here (1975–76) with 14.2 per cent and 24.9 per cent, respectively. It touched another peak in 1989–90 (13.2 per cent and 24.0 per cent, respectively, of revenue expenditure). Thereafter, the shares have fluctuated between 10–11 per cent and 20–21 per cent, respectively, for most years. Thus, over the period as a whole, there is no evidence of a systematic trend.

A kinked exponential function has been fitted to this data to examine the impact of structural adjustment, and the results are reported in Table 2.15. The share of elementary education expenditure and total education expenditure in the budget shows a small negative trend in the first period (1975–76 to 1991–92), which is non-significant. There is thus no evidence of the state devoting a smaller share of fiscal resources in the post-reform period.

Education Expenditure as Share of SDP

The share of education expenditures to the state SDP has been estimated on the basis of the 1980–81 SDP series and the 1993–94 SDP series, which yields higher estimates of SDP (and hence lower estimates of expenditure to SDP ratios) (Figure 2.6). The percentage of education expenditures to the state SDP has shown a positive trend in the earlier period but does not show any definite trend in the 1990s, despite slow increases in state income. The share of basic and total education in state income fluctuated around 1.2–1.8 per cent and 2.2–3.1 per cent respectively for most years in the 1980s, but rose to 2.4 per cent and 4.4 per cent respectively in 1989–90, and to 2.5 per cent and 4.2 per cent respectively in 1990–91. Compared to these years, the expenditure on basic education and total education (including technical education) has been slightly lower during the 1990s, touching 2.1 per cent and 3.8 per cent respectively in 1995–96, and declining to 2.5 per cent and 4.5 per cent in 1998–99.

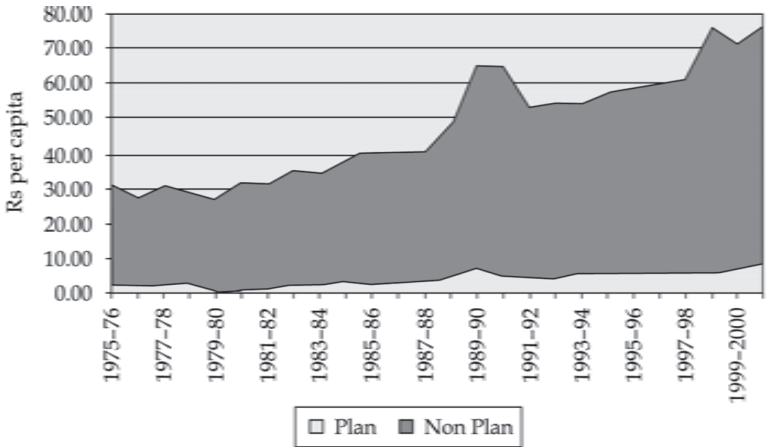
Figure 2.5
Per Cent Share in Total Revenue Expenditure on Education, by Levels (1975-76 to 2001-02)



Source: Same as Figure 2.4.

Figure 2.6

Per Capita Revenue Expenditure on Education, UP 1975-76 to 2000-01 (Rs)



Source: Same as Figure 2.4.

The results of the kinked exponential function regression (Table 2.15) show that elementary education expenditure as a percentage of GDP (1980-81 series) grew at a significant rate of 3.2 per cent in the first period, but was static during the post-reform period. The total education expenditure as percentage of GDP grew at a significant rate during the first period (1975-76 to 1991-92), but during the second period was near zero, although positive.

Revenue Expenditure by Level of Education as Share of Total Expenditure on Education

It has been argued that governments in India devote a relatively low share of the education budget to elementary education despite it covering eight years of instruction and having good merit compared to the other levels of education. Trends in this regard do not show dramatic shifts in the recent years, although some realignment of expenditure in favour of elementary education is evident. For all years except one since 1994-95, the share of elementary education in the total budget has exceeded 55 per cent. However, in the budget of 2001-02, this should reach the highest ever figure of 58.3 per cent. Correspondingly, shares for

Table 2.15
Growth of Elementary Education/Total Education Expenditure
using Kinked Exponential Regression

	<i>Period I</i>	<i>Period II</i>	<i>Whole Period</i>
	<i>1975–76 to 1991–92</i>	<i>1992–93 to 2000–01</i>	<i>1975–76 to 2000–01</i>
Elementary Education			
Real Expenditure/Child	5.4** (8.168)	4.45** (3.455)	5.11** (13.20)
Expenditure as percentage of budget	-0.23 NS	0.84 NS	0.09 NS
Expenditure as percentage of SDP 80–81 series	3.17** (5.54)	1.52 (1.19)	2.73** (7.66)
Expenditure as percentage of SDP 93–94 series	2.63** (6.62)	0.37 NS	2.20**
Total Education			
Per capita real expenditure on total Education	4.56** (9.97)	3.17** (3.56)	4.14** (15.13)
Expenditure as percentage of Budget	-0.77 (2.399) NS	0.24 NS	-0.46 (2.41) NS
Expenditure as percentage of SDP 1980–81 series	2.64** (6.76)*	1.00 (1.152) NS	2.201** (8.5)
Expenditure as percentage of SDP 1993–94 series	2.63** (6.62)	0.37 (0.414) NS	2.57** (7.06)

Source: *Unicef Survey, 1999–2000.*

Note: Values in the brackets are t values.

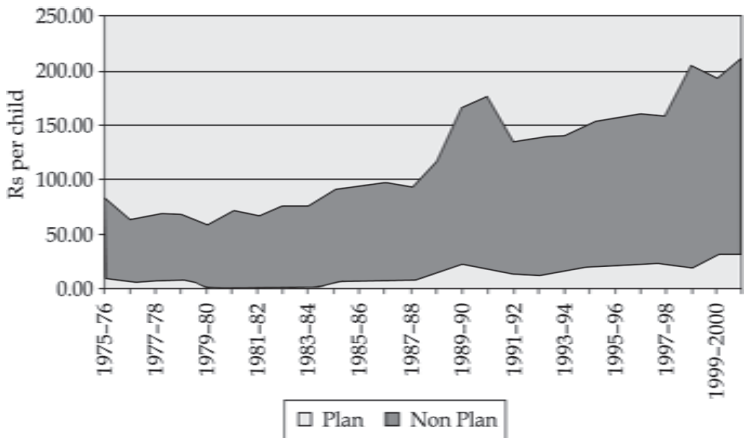
* – Significant at 5% level of significance.

** – Significant at 1% level of significance.

secondary education and technical education have slightly decreased (Figure 2.7).

UP was allocating 30 per cent of education spending to secondary education in 1990, and 33 per cent in 1995–96, like some other states (Andhra Pradesh [AP], Rajasthan) that have relatively poor elementary education indicators. While UP's elementary education spending share in education spending has been rising, its secondary education spending has the effect of reinforcing inequity. One reason for the relatively high allocation to secondary education is that UP has one of the highest shares of private aided schools at secondary level; 47 per cent of secondary students were enrolled in such schools in 1995–96 (NSSO, 1997). Students earlier paying fees in private unaided schools are thus being subsidised.

Figure 2.7
Real Revenue Expenditure on Elementary Education Per Child (Rs)



Source: Same as Figure 2.4.

Note: Child population figures extrapolated from Census of India.

Trends in Real Per Capita/Per Child Expenditure

Although expenditure on education has been rising, the gap between real per capita spending on education compared to other educationally-advanced states remains large and persistent. Per pupil nominal expenditures in UP are also among the lowest: in 1995–96 they were the third lowest among major states and only 40 per cent of the level in Kerala, Haryana or Himachal (Bashir, 2000). Trends in growth rates for per capita expenditure have been analysed for expenditure on all levels of education in Srivastava (2005a). These results show that although real expenditures continue to increase, there has been a sharp deceleration for all levels other than elementary education (Table 2.15).

Here we focus exclusively on elementary education expenditures per child (6–13 years), and total education expenditure per capita (Figures 2.6 and 2.7). Both expenditure trends show a peak around 1989–90 and 1990–91, and then again in 1998–99 and 2000–01. These peaks are undoubtedly due to adjustments in new pay scales and payments of salary arrears and should be discounted.

We have again resorted to the kinked exponential function and the results are shown in Table 2.15. There has been some

deceleration in growth rates in per capita/per child education expenditures in the post-structural adjustment period, but these rates are still significantly positive. Real elementary education expenditure per child grew at 5.4 per cent per year during 1975–76 to 1991–92 but the growth rate declined somewhat to 4.5 per cent in the second period (1992–93 to 2000–01). Real per capita total expenditure on education grew at 4.6 per cent per year during 1975–76 to 1991–92, but the growth rate declined to 3.2 per cent during 1992–93 to 2000–01.

We have shown in Srivastava (2005a) that UP is one of the few states able to slightly cushion the adverse impact of structural adjustment on educational spending. The analysis here confirms the earlier findings.

Plan and Non-plan Expenditures

Plan expenditures on education (particularly elementary) have grown more rapidly than the overall total plan expenditures. While total plan expenditures have grown at a compound growth rate of 9.9 per cent between 1985–86 and 1998–99, plan expenditures on education and elementary education have grown at doubled rates: 21 per cent and 22.1 per cent, respectively (Table 2.16). Most of this recent growth has been registered since 1994–95. However, plan expenditures form only 11.7 per cent of total education expenditures and 14.4 per cent for elementary expenditures. Overall plan expenditures formed 22.7 per cent of total state expenditure in 1997–98.

Plan shares (Table 2.16) were higher in the Eighth and Ninth Plan periods for elementary education. All other sectors (secondary, higher, technical) show a decline in the share of plan spending for the Ninth Plan period.

Expenditures by Other Departments on Education

Expenditure by other departments on education has fluctuated between 11.5 and 15.5 per cent of total education expenditure and has grown more rapidly during the 1990s. In basic education, the contribution of other departments is lower—ranging from 2.9 per cent in 1990–91 to 7.1 per cent in 1997–98. However, the latter estimate is probably an underestimate as it ignores the contribution

Table 2.16
Percentage Plan and Non-Plan Expenditure in UP by Levels of Education

Years	Elementary		Secondary		Higher		Technical		Total	
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1974–1978 (V)	7.53	92.47	3.63	96.37	7.12	92.88	15.51	84.49	6.81	93.19
1978–1980	7.13	92.87	3.28	96.72	5.99	94.01	15.06	84.94	6.68	93.32
1980–1985 (VI)	5.29	94.71	3.90	96.10	9.18	90.82	27.74	72.26	6.78	93.22
1985–1990 (VII)	10.02	89.98	2.87	97.13	5.52	94.48	30.50	69.50	8.57	91.43
1990–1992	8.20	91.80	4.56	95.44	5.36	94.64	31.13	68.87	7.84	92.16
1992–1997 (VIII)	12.15	87.85	4.88	95.12	5.33	94.67	33.47	66.53	10.10	89.90
1997–2002 (IX)	12.85	87.15	3.49	96.51	3.05	96.95	16.08	83.92	9.83	90.17

Source: Computed from State Budgets.

Note: Plan-wise shares given in Table 2.15 shows higher share of plan spending in the Eighth and Ninth Plan periods in elementary education. But all other sectors (secondary, higher, technical show decline in the share of plan spending in the Ninth Plan period.

of several departments such as those of rural development and *panchayati raj*, which are playing a more important role in the provision and maintenance of school infrastructure.

Central and/or External Funding

Central and/or external funding account for an important part of plan expenditure on education—55 per cent for the country as a whole. Outside of District Primary Education Project (DPEP) and a few other transfers, national and/or external funding is generally reflected in the plan expenditure of the Education Department. In the case of UP, the share of Central Sector Schemes (CSS) and external funds has been comparatively high. In two out of four years for which data could be collected, the share of CSS and external funds was 65 per cent of plan spending, but was 30 per cent in another (1996–97) (Bashir 2000). The contribution of CSS (Operation Blackboard, Non-formal Education and Teacher's Education, but excluding the Midday Meal Programme) has steadily increased from Rs 215 million in 1990–91 to Rs 697 million in 1996–97. With the launch of DPEP, national contributions increased to Rs 1,248 million in 1997–98, Rs 1,562 million in 1998–99 and Rs 1,599 million in 1999–2000. External assistance amounted to Rs 328 million in 1993–94, and 537 million in 1995–96 (*ibid.*).

In recent years, the Basic Education Project (BEP) (I and II), DPEP II and DPEP III have brought important and significant resources to basic/primary education. While the BEP was a state project funded in collaboration with the World Bank, DPEP I and II are nationally sponsored projects in which the state contributes 15 per cent of the resources.²

State Expenditure on Education

In sum, the current status of educational expenditures and the priority of education are questionable, but the fiscal scenario in the state is grim. More than one-fifth of state revenue expenditure is devoted to education—or about 3.5 per cent of the Net State Domestic Product (NSDP).

The fiscal priority given to education expenditures has marginally increased, although as a proportion of state income, expenditure on education does not show an upward trend. There is some evidence that the relative inter-sector priority given to elementary education has improved in recent years. The availability of plan funds for elementary education has also improved, which is not the case for other sectors in education.

Per capita/per child education expenditures appear to be closely correlated to educational performance, and these are comparatively very low for UP. In the post-structural period, per child real expenditures in elementary education, and per capita real expenditures in total education continue to increase at a significant rate, although lower than the pre-structural adjustment growth rate in real per capita expenditures.

The inflow of external and national funds (mainly to the elementary education sector) has also increased and this is partly reflected in the increased plan outlays.

Revenue Receipts and Cost Recovery from Education

Until recently, the government did not charge tuition fees up to the higher secondary level. Prescribed tuition fees are chargeable by aided institutions, and the government has also occasionally prescribed the schedules of tuition fees and other charges.

The schedule of such fees remains unchanged for several years at a stretch. As a consequence, the contribution of revenue receipts compared to the expenditure made by educational institutions has been constantly declining at all levels, necessitating a higher level of budgetary support, even at the same real expenditure levels.

So far as the government itself is concerned, the contribution of fees to the state budget has been very small. In 1984–85, revenue receipts to the state government were Rs 134.6 million, only 2 per cent of the state educational expenditure in that year. In 1990–91, the amount of revenue increased to Rs 339 million, but its relative contribution fell to 1.63 per cent. The contribution from educational revenue never reached even 2.5 per cent of the total educational expenditure through 1998–99. In 1998–99, fees contributed Rs 958.9 million, which represented only 1.63 per cent of the total educational expenditure of that year.

However, the reform in the fee structure (especially in secondary-level, higher and technical education institutions) is slowly making itself felt. The revenue receipts from secondary education rose from Rs 812.8 million in 1999–2000 to Rs 1,086.4 million in 2000–01 revised estimates (RE), and is budgeted to rise to Rs 1,272.2 million in 2001–02. The revenue receipts from higher education were Rs 42.4 million in 1999–2000, but fell to Rs 10.1 million in 2000–01. However, receipts from this sector are budgeted to increase to Rs 751.5 million in 2001–02. Receipts from fees in technical education fell marginally from Rs 366.5 million in 1999–2000 to Rs 339.5 million in 2000–01. This is however expected to increase to Rs 459.5 million in 2001–02. 'Other receipts' have been fluctuating, so that total receipts from the sector fell from Rs 885 million in 1999–2000 to Rs 421.3 million in 2000–01, although this is now budgeted to increase to Rs 570.1 million. The percentage of total revenue receipts in education to revenue expenditure was 3.3 per cent in 1999–2000 and rose to 3.6 per cent in 2000–01 (revised estimates). In 2001–02, this was budgeted to increase to 6.8 per cent.

In other words, cost recovery at levels of education higher than the elementary level remain extremely low, and are expected to remain low into the future, while the costs to parents at elementary level are quite high, as we have shown.

7. RECENT INITIATIVES IN ELEMENTARY EDUCATION

Overview

The state has taken a number of major initiatives in the area of primary/elementary education over the last decade. The main objectives of the state in this sector during 1997–2002 have been to provide Universal Elementary Education (UEE), provide education to all children up to age of 14, decentralise the planning, deliver and maintain educational services through local bodies and to help enforce the legal embargo on child labour (GOUP, 2002).

A state policy on education (GOUP, 1999) spells out a number of steps to improve access and quality of education, but falls short of articulating clear-cut goals. The policy has accepted, in principle, the need to increase allocations to basic and secondary education and to achieve an outlay of 6 per cent of SDP on education within a period of five years. According to the policy, the outlay on basic and secondary education will be raised immediately to at least 15 per cent of state expenditure, private institutions will be encouraged, and rules will be framed to allow them to raise revenue from tuition and other fees. While the government will not impose elementary tuition fees, it proposes to review the structure of fees, as well as those for secondary and higher education.

The emergence of education as a priority sector has led to a number of important national and state schemes/projects being adopted, with several supported by external assistance.

Central Government Schemes

Operation Blackboard started in 1986–87 with the aim of providing adequate physical infrastructure, at least two teachers and essential teaching–learning material to primary schools. An outlay of Rs 1,037.8 million was made in 2000–01. The Education Guarantee Scheme provides educational centres, called *vidya kendra* in localities without schools where there are at least 30 children in the 6–11 age group. The teachers in these centres are appointed on a contract basis by the panchayats, and the community is expected to find the space for the centre. The midday meal is an incentive

scheme under which each child in a recognised primary school, with minimum certified attendance, is provided a ration (not meal in UP) of 3 kg of cereal per month.

The most important national scheme is the *Sarva Shiksha Abhiyan* (SSA). The SSA, in partnership with states, aims to provide useful and quality elementary education to all children in the 6–14 age group by 2010. The SSA is an umbrella programme that enfoldes existing programmes such as Operation Blackboard and seeks to integrate other bilateral and multilateral programmes in the future.

The Government of UP (GOUP) has decided to develop plans for SSA in a phased manner with 16 districts in the first phase, 22 districts (DPEP 2) in the second, and 32 districts (DPEP 3) in the third. A sum of Rs 1,627.5 million was sanctioned by GOI for phase 1 districts in 2001–02.

The state government launched the UP Basic Education Project (UPBEP) I, with World Bank assistance in 1993, in 17 districts with the aim of achieving UEE. UPBEP II was started in the same districts to help balance an increase in enrolments. These projects concluded in 2000. The growth rate of enrolment in the BEP districts appeared about 22 per cent higher than the non-BEP districts, and the enrolment of girls (particularly SC girls) increased more rapidly than the overall rate. Official enrolment data showed an increase in total enrolment from 2.6 million in 1993 to 5 million in 2000, with the percentage of girls enrolled increasing from 31 per cent to 43 per cent during this period.³ Net enrolment rates in a survey of six districts were estimated at 84 per cent for the primary level (World Bank 2001b). Rapid increases were also observed at the upper primary level, enabling the project to meet its enrolment goals. The percentage of girls (6–14 years) out of school is estimated to have fallen from 50 to 18 over the project period.

Dropout rates, which were estimated to be 60 per cent for girls and 40 per cent for boys, may have fallen to 27.7 per cent as per Education Management Information System (EMIS) data with little differences between genders. Repetition rates at the primary stage are also estimated to have fallen from a 12 per cent average to 3.3 per cent. While the mid-term assessment did not show an improvement in Minimum Levels of Learning (MLLs), the final assessment study does show improvement, although the methodologies are not comparable. The project has made an impact on classroom processes. Village Education Committees (VECs) have played a

role in school construction and enrolment drives in the project areas.

The programme has been strengthening decentralised management, building institutional capacity at all levels, improving and strengthening teacher training, revising curricula and textbooks, and supporting improved classroom processes. Several models evolved for alternative schooling, although the total number of children enrolled was below target.

The national DPEP II started in 18 districts in 1997, was extended to four more districts in 1999. The objective of the project is to expand access, increase retention, improve quality and build institutional capacity.

The DPEP has been conceived as a holistic programme with flexible approaches, making operational the NPE's (National Policy on Education) strategy for decentralised planning and disaggregated target setting. Central to the DPEP strategy is the tailoring of programme interventions to meet the specific needs and requirements of a district. This requires decentralised planning, management and target setting for achieving Universal Primary Education (UPE). The approach bases itself on intensive community participation, with the community playing an important role in mobilisation, awareness building, planning and management of educational resources.

To improve access and retention, the project plans to build 3,343 new primary schools, reconstruct 1,243 existing schools, add 4,479 new classrooms and provide 12,738 toilets and 3,620 hand-pumps. Around 60 per cent of the cost of construction is being borne by other schemes of the Department of Rural Development or the Prime Minister's Grameen Rozgar Yojana (PMGRY) through convergence. To meet shortage of teachers, 8,649 teachers were appointed and an additional 6,471 *shiksha mitras* were in place by March 2001.⁴ The state has started a para-teachers or shiksha mitra scheme under which high school graduates can be employed as para-teachers, half of whom must be women. The selection of the shiksha mitras will be done by the panchayat VEC, which will have administrative control. The scheme is expected to reduce the student-teacher ratio of 52:1 at the primary level. To date, 30,000 para-teachers have been appointed in primarily single teacher schools on 10-month contracts at a monthly salary of Rs 2,250.

In addition, a number of alternative schooling models have been adopted under DPEP II, including *shikshaghar*, *balshala*, *prahar pathshala*, *maktabs/madarsas* and Rishi Valley models. Together with EGS centres, these models cater to 92,613 children (50,635 boys and 41,978 girls).

Under DPEP III, launched in April 2000, an additional 38 districts are being covered with a total project cost of Rs 8,040 million and project duration of five years. Overall, 77 of erstwhile UP's 83 districts have been/are being covered under the projects. The objectives and the approach of DPEP III are similar to DPEP II.⁵

A joint UN initiative has been launched in the state, which will supplement DPEP in specific focal areas, such as the programme to make education interesting for students and teachers (*ruchi-poorna shiksha*). In addition, a Unicef-supported project is under way which will cover the six districts in the state not included under DPEP III.

Thus, a large number of successful measures have been taken to improve the quality of education that include improved training, focus on classroom processes and improvement in curricula and textbooks. Comparisons of learning levels in language and mathematics between the Baseline Assessment Survey (BAS) (1997) and the Mid-term Assessment Survey (MAS) (2000) shows an improvement for class 1 in language in 12 of 15 districts. Performance in mathematics improved in all districts. Among class 5 students, language competency improved in eight of 15 districts, while math improved in 10 districts.

On the one hand, official enrolment statistics, quoted in the GOUP 2000–01 Annual Report, demonstrate an increase of 35 per cent in enrolment in 2000–01 over 1996–97, with girls' enrolment increasing by 60 per cent. EMIS data shows a decrease in the drop-out rate from 52 to 46.8 per cent, while repetition rates have declined from 5.2 per cent to 3.3 per cent over the period. However, detailed EMIS statistics for the period 1997–2000, reported by SIEMAT (State Institute of Educational Management and Training), and analysed by Aggarwal (2000) show a mixed picture. GER showed an improvement in all but two districts, with girls' enrolment growing more rapidly. Infrastructure facilities also improved in the districts. However, teacher strength has not kept pace with the increase in the number of schools, leading to a significant increase in the percentage of single teacher schools in all 16 observed

districts. Student–teacher ratios were higher than 60 in all the districts and showed an improvement in only two. The extent of enrolment increase varied between districts, but six showed a decline in enrolment for Class 1. The percentage of SC/ST students enrolled showed small changes (in either direction).

Decentralisation and Community Participation for Education

The 73rd and 74th constitutional amendments provide for devolution of powers, responsibilities and authorities to panchayats. Under the amended UP Panchayat Act, the panchayats are expected to create the following committees for assistance: the *vikas samiti* (agriculture, rural industry and development schemes), the *shiksha samiti* (education), the *lokhita samiti* (public health, public works) and the *samata samiti* (welfare of women and children, interests of the SC/ST/OBC, and protection of these groups from ‘social injustice and exploitation in any form’). Higher tiers of the panchayati raj institution are also required to form similar committees. Thus, the education committee has emerged as the main instrument to shape the responsibilities entrusted to panchayats in the sphere of primary and secondary education.

Both the Panchayati Raj Act and the Basic Education Act have been amended to conform with and specify the composition of the VEC while expanding the list of its powers. Under the amendment of the Basic Shiksha Act in 2000, the VEC would consist of the *pradhan* as chairperson, three parents/guardians (one a woman), and a senior teacher of the primary schools (who shall be member secretary). The guardians shall be nominated to the VEC by the Additional Basic *shiksha adhikari* (education officers). Functions of the VEC include, when necessary, the selection of *shiksha mitra* (para-teachers), support for the establishment of EGS centres, selection of EGS *acharyas* and the supervision of the construction of new schools, and mobilising the community in favour of schooling.⁶

It should be noted that the present powers of the VEC fall short of the pronouncements made by the government in UP. In any case, since the education committees have been endowed with a number of powers and responsibilities, building their capacity is crucial to the development of basic education in the state. Both the UPBEP and DPEP projects have undertaken capacity development of VEC

members on a large scale. A three-day training programme has been organised at the village level for capacity development and environment building. The 2001 World Bank report (2001b) acknowledges the role of the VECs in the construction of new schools, micro planning and campaigns, but notes that their role in day-to-day management is not yet established.

8. RESOURCE REQUIREMENTS FOR UEE

With the promulgation of the Constitution 93rd Amendment and the commitment of the central government to ensure that every child is in school by 2007, an estimation of the additional resource requirements for UEE in the state is imperative. There have been several attempts to estimate the additional financial requirements of UPE or UEE (GOI, 1999; Jha, 1999; Saikia, 1997; Srivastava, 2005b; World Bank, 1999).

Financial Feasibility of Achieving UEE

In Appendix 2A-1 we present estimates for the costs to the state of achieving UEE in UP. These estimated costs have a number of limitations that could either raise or lower the estimates. Although the objective of the study was to estimate state specific costs, the norms and the unit costs are national norms for several parameters. Moreover, the scenarios presented are reasonably realistic, but there is scope for a better utilisation of existing resources and for cutting costs, which are not fully explored here. The question of quality upgrade is of primary importance and is crucially linked to outlay of resources, but these implications have not been analysed here.

The Appendix shows estimates of the total resource requirements and additional resource needed for UEE (an additional Rs 800 billion in UP). Although UP has increased the relative allocation to elementary education, and has largely been able to cushion the impact of structural adjustment on real education expenditure, a further hefty increase would be needed (0.8–2.6 per cent of GDP) if the state were to achieve UEE as per the SSA targets.

The additional costs of UEE estimated represent the total costs of UEE at the state level, which are normally shared by the central and state governments. However, the earlier analysis has

compared them mainly to costs borne by only the state. It is noteworthy that certain categories of costs, such as incentives (scholarships, midday meals and textbooks) are increasingly covered by CSS. Moreover, with the launch of the SSA, the central government has taken on a greater share of responsibility for the achievement of UEE. Our approach shows that the fiscal effort is beyond the fiscal capacity of states; resources will have to be drafted from the central government or external sources if the goal of UEE is to become financially feasible.

9. CHALLENGES AND THE FUTURE OF ELEMENTARY EDUCATION

Several challenges to universal elementary education remain:

- **Access:** Despite progress, a substantial proportion of children (20–25 per cent) was still out of school at the end of the 1990s. Most of these children belong to poorer and socially deprived groups and girls bear a disproportionate burden of educational deprivation.
- **Availability:** Although schools, other physical infrastructure and the number of teachers have increased over the 1990s, the growth has lagged in requirements. Many schools still lack the basic minimum infrastructure prerequisites.
- **Quality:** The overall quality of education remains low in terms of content, teaching methods, and so on. Quality is seriously compromised by the evaluation system that is expected to assess quality and screen students. Different groups of students have differential access to schools of variable quality, with students from socially and economically deprived groups accessing the poorest quality schools. Thus quality, along with issues of access, is integrally linked to the issue of equity in the educational system.
- **Accountability:** The system is afflicted with low accountability for the administration and teaching staff, which is then intimately connected with their performance and the overall efficiency.
- **Efficiency:** Both internal (measured by indicators such as dropout, repetition, average years taken to complete an educational cycle) and external (measured by indicators such as

maintenance and optimum utilisation of assets, performance and accountability of teachers, administrators and others) is low.

- **Participation:** In addition to contributing to efficiency and accountability, participation of the primary stakeholders in decision-making and management, particularly at lower levels, is now significant to the rights-based approach to educational development. Despite some change, progress in this direction continues to be slow.
- **Resources:** Per capita and per student public resources allocated to education in UP continue to be very low and have serious implications for access, adequacy and quality of the system.

There have been major recent government initiatives. Progress has been achieved in the rural sector where VECs have been given some powers and considerable responsibilities, but the principal powers still continue to reside with the educational administration at the block and higher levels. There is, in our view, a mismatch between the powers and responsibilities of the VECs and higher authorities. Having brought an increasing number of parents and children to the doors of the school, it is important that they become direct stakeholders, and that the teaching-learning process improves in step with the increased enrolments.

The state has adopted a number of innovative approaches to bring children from socio-economically deprived groups into the educational process. These children often have a difficult social existence where their contributions are often quite significant to the household's subsistence strategies. All in all, these children come from a variety of social, cultural and economic settings, which can be identified through local micro planning, but solutions to bring these children into school require strong community participation, local institutional support and commitment of resources.

Each of the various estimates of additional costs for UEE suggests that at the very minimum, an additional annual 0.7 per cent of GSDP will be required if the state is to reach this goal within the time frame and the minimum norms accepted by the SSA. GOUP has only been able to maintain the share of basic education in GSDP over the last decade, but raising this share may be difficult. At the

same time, resource flows from national and the external agencies have already been augmented to some extent. Under the SSA, GOI has committed itself to meeting 50 per cent the required resources in the Tenth Plan, with the burden of financing gradually being assumed by the state. In view of resource requirement and GOI commitments, we suggest that the state work out its own financial requirements and commitment to the education sector as a whole over a period of 15 years.

The requirements mentioned above are based upon a minimum set of norms and a package of cost-saving strategies. Inexpensive state strategies to bring disadvantaged children into the educational mainstream can succeed in the short run if they have strong community support. However, in the long run, considerable (and marginally greater) investments may be required to bring such children into schools, retain them and provide them with good quality education. Free education must not simply be interpreted as free tuition. A number of studies show that households incur substantial direct costs in sending children to government schools, and the state is obliged to assess and offset such costs.

Substantial resources have come through externally-assisted programmes, which pose a repayment liability either on the state or national government, and have to be fiscally and institutionally sustainable after the project duration. The first such programme launched during the 1990s (Basic Education Project) ended in September 2000. Considerable attention was paid to internal financial sustainability after the project and the state had been able to absorb the additional commitments raised by the programme. The issue of financing education through alternative channels and the issue of institutional sustainability needs to be seen and addressed in its wider context.

This study has offered a detailed comparison of the private and governmental sectors in elementary education in UP, which suggests that while the private sector performs better, the government-managed schools score higher on grounds of access and equity.

In conclusion, there is clear evidence of recent dynamism in the elementary education sector in the state. Building upon the foundations of the earlier years, it is possible to reach the crucial goal of universal elementary education in the near future. A strong state commitment to this goal is required, expressed in terms of the

commitment of higher resources, relevant policies and a flexible and decentralised approach that will allow community ownership for all aspects of the programme.

APPENDIX 2A-1

FRAMEWORK AND METHODOLOGY TO ESTIMATE COST OF UEE IN UP

We have used the time frame and targets for UEE set by SSA with data stemming primarily from the Unicef Survey 1998–99. This has been supplemented by data and results from the NSS 52nd Round, National Family Health Survey II, NCERT Sixth Educational Survey, Ministry of Human Resource Development and State Education Department Reports.

A norm-based approach has been developed with two variants in which norms (physical as well as financial) have been drawn from either from the Majumdar Expert Group Study or from the SSA. Five broad approaches were followed in the original study, each based on the above two norms. These five approaches have been categorised on the basis of (a) assumptions relating to teacher salaries; (b) type of schools in which the additional enrolment is expected to take place, namely only government (including government aided) or private and unaided. For the present purpose only three of the approaches are relevant. These approaches are as follows:

First, it is assumed that all the students get enrolled in government schools and that teachers in all states are paid at the rate prevailing in the concerned state. The UP teacher salary used was Rs 5,272 for primary and Rs 7,177 for upper primary. Second, it is assumed that a certain proportion of students will also be enrolled in private unaided schools, thereby reducing the burden on state financed schools. Again, a state-specific teacher salary was used. Third, additional enrolments are assumed to be in government financed schools, but all additional teachers are assumed to be para-teachers, whose prevailing salary in UP was Rs 2,250.

As mentioned above, these approaches use the norms set by the Expert Group and Sarva Shiksha Abhiyan (SSA). Therefore, six different estimates have been made so as to evaluate the impact of various alternative scenarios for financing UEE available to states.

The estimation of the total number of children in each age group in the target years was derived from the projected population figures prepared by the Registrar General of India till the year 2016. Figures regarding children in school are from the enrolment rates estimated by three sources: the NSS 52nd Round for 1995–96; NFHS II for 1998–99; and the

Unicef survey for 1999–2000. However, part of the Unicef survey spilled into the subsequent year and age-specific enrolment rates estimated from the Unicef survey are higher than those estimated from the NFHS survey. The base enrolment rates that we have taken are from the NSSO (1998).

The target enrolment rates have been calculated as per the following assumptions: First, the NER at the primary level for 2003–04 has been assumed to rise to 95 per cent. The GER for that year, compatible with UPE, has been calculated by adding the estimated percentage of under-age and over-age children. While the NER is assumed to stabilise, the proportion of over and under-age children is expected to halve by 2007–08, leading to changing estimates of GER in 2007–08 and 2010–11. A similar methodology has been used to calculate relevant parameters for upper primary level.

Base year figures for the number of teachers, educational infrastructure, proportion of children receiving incentives are estimated on the basis of the Sixth Educational Survey for 1993–94.

Analysis of Cost Estimation

Using the first variant (additional enrolment in government schools, state specific salaries and Expert Group norms) the total additional cost of achieving UEE is estimated to be the highest for UP (about Rs 847 billion for the period 2001–02 to 2010–11 at 1998–99 prices) compared to the other states. Bihar will require the next highest quantum of resources (Rs 452 billion). WB, MP and Rajasthan will require additional resources of the order of Rs 356 billion, Rs 247 billion and Rs 337 billion respectively. AP will require Rs 234 billion. TN, an educationally advanced state, will require Rs 173 billion. Assam requires the lowest investment of Rs 104 billion.

Allowing for enrolments to also take place in private unaided institutions reduces the financial requirements of UEE on government quite significantly. With state specific salaries and Expert Group norms, the total estimated cost of UEE over 2000–01 to 2010–11 in UP would decline from Rs 846 billion to Rs 587 billion, when the existing proportion of students in unaided schools remains constant over the period.

Allowing all teaching posts to be filled by para-teachers during 2001–02 to 2010–11 also allows substantial savings (a decrease by 42 per cent) to the total cost of UEE.

In general, estimated costs of UEE are lower with SSA norms, if additional students are also assumed to enrol in private unaided institutions, and if the additional teachers are para-teachers. However, each of these cost-saving steps may have implications for equity and quality and may lead to a dilution of governmental responsibility in the provision of free and compulsory UEE and need to be evaluated carefully for such implications.

Estimated Costs of UEE as % SDP

The first variant (Expert Group norms with state specific salaries) represents the most expensive option. Averaged over the entire period, UP needs 2.5 per cent of SDP allotted to UEE. The additional cost is reduced by little less than half (to 1.5 per cent of SDP) when SSA norms are used. When para-teacher salaries are used, one would expect another large reduction, but due to additional recurrent costs, the figure reduces to 0.8 per cent of SDP.

Looking at the cost in terms of revenue expenditure, the high-cost variant would on average absorb 11.2 per cent of revenue expenditure in UP. The low-cost variant would absorb 3.5 per cent revenue expenditure annually.

SSA norms are cheaper than those adopted by the expert group, and savings in salaries reduces the public resource requirements for UEE by a considerable margin. The cost could necessitate an additional expenditure varying from an average of 2.6 per cent of SDP to 0.8 per cent. In the cheapest scenario the state will affect cost-savings through adherence to the SSA norms and would hire additional teachers only as para-teachers.

Composition of the Cost of UEE

Costs incurred for UEE have been divided into non-recurrent and recurrent cost. Non-recurrent/capital cost, which consists of classroom, equipment and ancillary facilities expenditure, is mainly spread in the first two years of the proposed decade. Since it has been assumed that all initial capital requirements will be fulfilled in the first two years (keeping in mind the universalisation target year is 2003–04), the capital cost has gone up to as much as 70 per cent of the yearly total in the first two years. Thereafter, it reduces to 1–3 per cent in the subsequent years. As we have seen, the later years have very little capital cost.

Looking at the itemised analysis of capital costs, we find that since SSA norms for classroom/school-student ratio are more liberal, capital costs are lower. With Expert Group norms, capital costs are high and range between 8–12 per cent of the total expenditure in all the eight states under the different variants considered. The share of expenditure on equipment and ancillary facilities is almost insignificant.

Recurrent Expenditure consists of teacher salaries, grants (includes development, maintenance, training cost and teacher grants) and incentives (includes midday meal scheme, uniforms, scholarships, and textbooks). Teacher salaries have the highest share of expenditure (more than 80 per cent of total expenditure under SSA norms and a slightly lower percentage for Expert Group norms). With para-teacher recruitment,

the share of teacher salaries in total additional expenditure for UEE declines to between 50 and 67 per cent of total estimated costs.

Of the three main components of recurrent cost, incentives have the next highest share in additional costs. Under the assumptions made in these estimations, the cost of incentives is lower under SSA norms compared to Expert Group norms.¹ However, their percentage share varies, ranging from about 10–25 per cent in different states and under different variants.

Teacher grants, training costs and so on form the third aggregated component of recurrent expenditure. These are again higher under Expert Group norms and range from 8 to 24 per cent of total additional expenditure. Under SSA norms, their share ranges from 6 to 16 per cent.

An attempt was also made to find out what percentage increase is needed in total expenditure on elementary education.² In the first variant, (with Expert Group norms) UP needs average annual increase of 66 per cent from the current levels of its expenditure. When the lowest cost option (with SSA norm) is considered, UP requires a 20.6 per cent increase.

Appendix Notes

1. SSA incentives: textbooks, midday meal, scholarship; Expert Group incentives: textbooks, midday meal and uniform.
2. Current level of expenditure has been calculated as the average of expenditures incurred by the states between 1995 and 2000. Then it has been compared with required levels of expenditure by suitably deflating it. The comparison has been made at the constant price of 1980–81.

Notes

1. The chapter partly draws upon a study prepared by the author on 'Social Development in Uttar Pradesh' for the Planning Commission, Government of India. Research and computing support for this paper came from Mr Jayendu Krishna, Dr N.K. Singh and Ms Aradhana Srivastava, and is gratefully acknowledged. The usual disclaimers apply.
2. The total outlay of these projects is as follows: UP Basic Education Project (1993–2000)—17 districts and Rs 7,287 million; DPEP II (1997–02)—22 districts and Rs 629,930 million; DPEP III (2000–05)—38 districts and Rs 8,873 million.
3. Enrolment growth in class 1 has slowed down since 1997, but the enrolment increase exceeded the increase in the creation of physical capacity and recruitment of new teachers. The pupil–teacher ratio increased from 47 to 60, and students per classroom in many of the districts remains very high.
4. Besides strengthening the regular school system, the project also aims to improve access to marginal groups and older girls through several models

of alternative schooling. They look to improve the access and retention of young girls by strengthening early care and education in the ICDS centres (to reduce the need for girls to care for siblings). The integration of children with disabilities is now a special focus of the programme and a number of initiatives have also been taken to increase girls' participation.

5. The physical inputs that will be provided by the project include 2,445 new primary schools and 3,020 reconstructed schools, 11,640 new classrooms, 13,958 toilets, 4,418 hand-pumps, 1,530 ECCE (Early Childhood Care and Education) rooms, 388 block resource centres and 3,850 *nyay panchayat* resource centres.
6. The BEP and the DPEP have also used a number of other mobilisation forms and institutions to build awareness and raise the level of community participation. *Kala jathas* (cultural troupes), *nukkad nataks* (street plays), *school chalo abhiyan* (enrolment campaigns) and *maa beti melas* are organised under the DPEP to generate community awareness and interest in primary education and to create supportive environment for girls education. Similarly, the *mahila samakhya* programme as a women empowerment strategy was under implementation in 17 districts of the state. Under DPEP III, the programme has now been extended to another seven districts. Under this programme, *mahila sanghas* (women's collectives) are the focus point for planning several activities at the village level. Women collectively analyse their situation in the forum of the *sangh*. This has increased the demand for educational opportunities for women and their daughters and has enabled women to take some control and appreciate the value of formal schooling for their children and themselves.

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3

Bihar: Including the Excluded and Addressing the Failures of Public Provision in Elementary Education

ANUP K. KARAN AND PUSHPENDRA

INTRODUCTION

Bihar is the least developed state of India. In 2000–01, as compared to a per capita income of Rs 10,254 for the country as a whole (1993–94 prices), Bihar's per capita income stood at Rs 3,859, which is about one-third of the national average. In Bihar, approximately 90 per cent of the population resides in rural areas—a much higher share than in the country as a whole. Occupational dependence on the primary sector (agriculture and allied activities) is to the extent of approximately 80 per cent of the workforce. However, because of low productivity in and a very slow growth rate of agriculture, the state is characterised by mass poverty and pauperisation. The Head Count Ratio (HCR) of poverty in Bihar is more than 40 per cent, with the bulk of the poor residing in rural areas.

One of the profound causes (or consequence) of Bihar's backwardness lies in rampant illiteracy and low levels of educational achievement in the state. Even after 50 years of independence, more than half of the population of the state is illiterate. Female literacy in the state is a mere 33 per cent, which is the lowest among all the states. Rural literacy for women of the Scheduled Castes (SCs) is as low as 12 per cent. The corresponding figure is 47 per cent in the case of females of the general category. In urban areas, female literacy among the SCs is less than half of that for all females.

Besides a very low level of literacy among the SCs, intra-group variations in literacy within the SCs are also very high. Some of the castes within the SCs such as the Musahars of north Bihar and the Bhuyian of south Bihar, among others, have a negligible literacy rate. Since these groups are at the lowest rung of the caste hierarchy, they face various kinds of social oppression and hurdles in improving their level of literacy.

More than 45 per cent of the children in the age group of 6–14 years are out of school. Similarly, in the case of those social groups who rank lower in the social hierarchy, such as SCs, STs, agricultural labourers and so on, literacy and the proportion of school going children are at abysmally low levels. This deplorable condition of elementary education in the state is a reflection of its gross neglect. Various studies attribute this situation mainly to supply side constraints (Govinda, 2002; PROBE, 1999). Poor infrastructure, inadequate number of schools, inadequate and poorly equipped classrooms, very high pupil–teacher ratio, upper caste and male bias in the schooling system, social discrimination, lack of active teaching in government schools, low allocation as well as low utilisation of public funds, cost of schooling even in government schools—all these factors are considered as the main hurdles in educational achievements in Bihar.

Against this background, the present chapter discusses problems related to the growth of elementary education in Bihar.¹ The chapter is divided into five sections. Section 1 gives a brief historical background of educational development in Bihar, both public and private, with a view to understand historical weaknesses in the process. Section 2 gives an overview of the enrolment scenario in the state and looks into some of the important reasons behind low enrolments. A brief discussion on the growth and features of private schooling is given in Section 3. Educational expenditure—public, private and household—is dealt with in detail in Section 4. The last section (Section 5) puts forth ideas on the potential of future reforms in the education sector in order to meet the challenges of universal elementary education in the state. The chapter draws heavily upon the Unicef survey of 1999 as also the National Sample Survey (NSSO) of 1999–2000, among others, and also integrates experiences from the field collected from published and unpublished sources.

1. HISTORICAL BACKGROUND

At the advent of the British in India, there existed a large network of indigenous schools in Bihar. Jha (1979) termed them as community schools and described how they served different sections of the population through different types of schools and curriculum (in a way making education contextual, and socially and culturally relevant, though conforming to the rigid caste structure and discriminatory against the lower strata). Under British rule, the system of community schools withered away. They introduced the so-called modern education system, shaped and supported by different acts and reforms from time to time. Before 1919, education was a central subject.² Education was made a provincial subject by the Government of India Act, 1919.

One hallmark of the educational administration during British rule was the sole control of the District Boards over schools. It was only in the year 1954 that the Indian government decided to take over control and administration of primary and middle schools and gradually there emerged a large and a complex structure of educational bureaucracy. Through the 42nd Amendment to the Indian Constitution in 1976, education was brought into the Concurrent List, or a subject on which both centre and states could legislate. However, the administrative set-up kept changing with the main concern remaining better coordination and coping with the increasing workload. The administrative set-up has also undergone tremendous changes at the field level. The Bihar Education Project (BEP)³ and State Programme for Elementary Education Development (SPEED)⁴ were introduced in the state to give a fillip to the universalisation of primary education. With plans afoot to devolve a set of powers and functions of educational administration to the three-tier panchayats under the *Sarva Shiksha Abhiyan* (SSA), educational administration seems to have come full circle in the last five decades.

There has always been private participation in school education in Bihar. The state policy has generally been to allow the growth of the private sector to cater to those students who can afford fee-charging private schools. However, the history of the growth of private schooling in Bihar has not been progressively linear. The year 1976 came as a landmark year in the history of the educational

development of Bihar when the state government enacted the Bihar Non-government Elementary Schools (Taking over of Control) Act, 1976 and subsequently passed a resolution regarding 'Conversion of Private Primary Schools into Government Institutions, 1976'. The Act provided for taking over of non-government elementary schools under the state control for better organisation and development of elementary education in the state. Apart from private schools, schools managed by the District Boards, Zilla Parishads, Municipal Boards and the Patna Municipal Corporation and so on were taken over by the state government with effect from 1 January 1971. It also laid a procedure for the takeover of aided elementary schools and schools managed by public or private undertakings. The Act provided for the setting up of an Elementary Education Committee to consider all matters connected with opening, improvement and upgradation of elementary schools in the district. The resolution regarding conversion of private primary schools into government schools made the provision that all regular teachers in the non-government elementary schools, other than those managed by the minorities, Tata Iron and Steel Company (TISCO) and such other undertakings taken over by the state government from 1 January 1971 would be treated as government servants.

There have been important implications of the takeover of 1976. Suddenly the number of government-run primary and upper primary schools and the number of government teachers went up in the state. Expenditure by the government on elementary education shot up accordingly. But this also threw open the challenge to deal with a large number of such teachers who were quite inadequate in terms of their educational level, training and attitude. A large number of them were males and belonged to the upper caste. There were a good number of schools which lacked proper infrastructure. All these came to the government as a legacy. The institutional capacity of the government to train the untrained teacher force could not match the demand. Development of school infrastructure demanded a huge investment that never came through. The fallout, better termed as historical weaknesses, can be observed even today as indicated in terms of caste- and sex-wise distribution of teachers, school infrastructure and so forth.

The takeover of 1976 resulted in a drastic decline in the number of private elementary schools in Bihar. In fact, at the time of the Fifth Educational Survey (1988) it was observed that the private

sector was playing a major role at the secondary and higher secondary levels of education rather than at the primary level. However, in the late 1980s, the policy of unaided private education paved the way for the beginning of another phase of growth of private schooling in Bihar.

2. ACCESS TO EDUCATION

An Overview of Enrolment

Enrolment of every child in the school-going age is supposed to be one of the first steps towards universalisation of elementary education. In Bihar, enrolment in elementary education is at an unacceptably low level. As per the official sources of the Ministry of Human Resource Development (MHRD) more than 6 million children in the age group of 5 to 14 years were out of school in 1999–2000 (MHRD, 1999a). As per the estimates based on the NSSO, the magnitude of out-of-school children in the same age group may have been more than 10 million in the same period. Although over the years the enrolment ratio has increased in the state, it is still among the lowest when compared with other states (see Appendix 3A-1). In 1999–2000, the Gross Enrolment Ratio (GER) at the primary level, which is 100 per cent or above in many states, was only 78.56 per cent in Bihar. At the upper primary level the same was as low as 32 per cent (Table 3.1).

The GER up to the elementary level in the state works out to be 64.39, which is the lowest among all the major states in India. In comparison to India the enrolment ratio in the state has been substantially lower both for boys and girls at the primary and the middle level. Further, the GER in Bihar increased from 49 per cent in 1980–81 to 63 per cent in 1993 and 79 per cent in 1999–2000 at the primary level but has been almost stagnant between 1993 and 1999–2000 at 32 per cent at the middle stage. The progress in the enrolment of girls in the state has been extremely poor during the last two decades. Moreover, the overall trend of the GER shows a widening gap between India and Bihar ever since 1980–81 particularly in the case of enrolment of girls at the primary as well as upper primary levels. This essentially indicates poor enrolment growth in the state vis-à-vis the rest of India.

Table 3.1
Gross Enrolment Ratio at Primary and Upper Primary Stage
in Bihar and All India

Year		Classes 1-5		Classes 6-8	
		Bihar (%)	All India (%)	Bihar (%)	All India (%)
1999-2000	Boys	94.51	104.08	41.38	67.15
	Girls	61.46	85.18	22.04	49.66
	Total	78.56	94.90	32.36	58.79
1993	Boys	77.19	90.04	40.57	62.10
	Girls	47.43	73.10	20.70	45.42
	Total	63.08	81.85	31.60	54.21
1980-81	Boys	66.48	75.45	30.84	41.58
	Girls	30.22	50.57	10.37	22.84
	Total	49.03	63.41	21.71	32.77

Source: NCERT (2002). *Education Statistics*. New Delhi.

The GER is fraught with many technical and methodological issues.⁵ The Net Enrolment Ratio (NER) works out to be disquietingly low in the state.⁶ As per the recent statistics released by the MHRD the net enrolment ratio in the state is as low as 63 per cent as against 71 per cent at the all-India level. The Unicef survey,⁷ however, shows a relatively higher NER, particularly in rural areas for primary level (Table 3.2). Nevertheless, even this survey indicates the lowest enrolment ratio in Bihar among all the eight states covered in the survey.

Table 3.2
NER in Bihar, 1998-99

Category	Sex	Primary	Upper Primary	Total
Rural	Boys	78.6	36.3	61.7
	Girls	66.3	24.1	49.4
	All	72.8	30.7	55.9
Urban	Boys	77.2	42.5	63.3
	Girls	74.7	43.0	62.0
	All	76.0	42.7	62.7

Source: *Unicef Survey*, 1999-2000.

Since BEP is considered to be an important intervention in the area of elementary education in Bihar, one should expect very high enrolment in the BEP districts. However, even in the BEP districts the progress has been very slow particularly during the late 1990s. In this regard, the CAG Report (2000) noted a sharp decline in

enrolment of children and increase in the gender gap between 1998 and 2000. Also, there was an all round decline in the social group-wise enrolment ratio of children during this period. Figures of the enrolment ratio in the 17 District Primary Education Programme (DPEP) districts for recent years are presented in Table 3.3.

Table 3.3
Enrolment Ratio (%) in the BEP Districts by Gender and Social Group

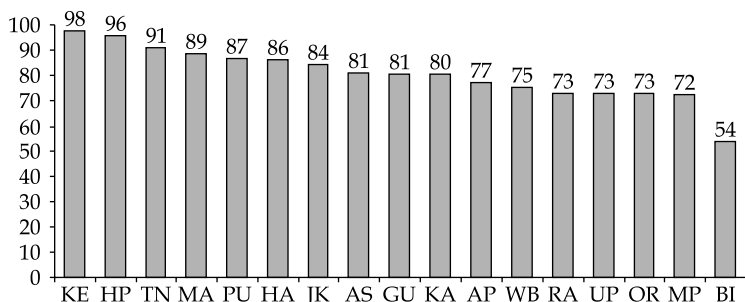
	<i>Boys</i>	<i>Girls</i>	<i>Gender difference</i>	<i>SCs</i>	<i>STs</i>	<i>Others</i>
1998	87	64	23	82	79	75
1999	81	63	18	78	76	71
2000	76	43	33	64	78	55

Source: CAG Report, 2000.

The latest enrolment figure shows that even in the BEP districts, the enrolment ratios for boys and girls are only 76 and 43 respectively, which have declined from 87 and 64 respectively in 1998. In the face of this declining trend in enrolment, efforts were taken in the following year and enrolment drives were organised in all BEP districts. As a result, the total enrolment figure increased in the year 2000–01 (see BEP Annual Report, 2000–01). However, such drives may be difficult to sustain for a longer period in the absence of long-felt infrastructural and other administrative support from the state.

Both the GER and NER figures are based on the official estimates of enrolment supplied by the school administration at the lowest level. The enrolment estimates based on household approach not only work out to be still lower but also the difference between the two is one of the highest in the case of Bihar. This essentially suggests that all those children being shown as enrolled in the school registers do not effectively attend schools. As compared to enrolment rates, attendance rates give a better picture of schooling. This solves the problem of fake enrolments and potential dropouts. Based on the household approach, various rounds of the NSSO give estimates on attendance ratios. There are wide variations in the attendance rates across different states. In 1999–2000 Bihar had the lowest Gross Attendance Ratio (GAR) of 54 per cent among the major states (Figure 3.1).

Figure 3.1
Gross Attendance Ratio (%) in Different States



Source: NSSO, 1999.

Except for Bihar, none of the major states has a GAR of less than 70 per cent. Information culled from the unit level data of NSSO (1999–2000) reveals an even lower attendance rate in Bihar among SCs/STs (40.8 per cent) and Muslims (46.1 per cent). The attendance rate among upper-caste Hindus and OBCs was 85.6 per cent and 56.2 per cent respectively. The corresponding all-India figures for SCs/STs, Muslims, upper-caste Hindus and OBCs were much higher at 69.0 per cent, 69.7 per cent, 89.6 per cent and 75.3 per cent respectively.

The Unicef survey (2000) also records the attendance rates 'as per school records' as well as 'per head count'. These rates are not different from those reported by the NSSO though NSSO figures are based on the household survey. The attendance rate on the basis of 'head count' on the day of visit is taken as the actual participation in schooling. As per head count, overall attendance was 56 per cent, with 54 per cent boys and 59 per cent girls. As per school records, 58 per cent boys and 64 per cent girls, with overall 60 per cent students attended school on the day of the survey. The percentage of 'every day attending' children is one of the lowest (approximately 30 per cent) in Bihar.

The trends show an increase in the enrolment ratios over the years. However, as mentioned earlier the enrolment ratio is the lowest in Bihar among all the major states of India. The slow progress in enrolment in the state can be juxtaposed with the highest population growth in the state during the 1990s. Because of the

28 per cent population growth during the last decade, the growth of the child population in the age group of 5 to 14 years is expected to be very high in comparison with earlier decades. If the present state of enrolment continues in Bihar, an increasing number of children are likely to remain out of formal school coverage in the coming years.

Enrolment by Type of Institution

The NSSO (1995) 52nd round provides information on enrolment in different types of management of schools. As per this source, public sector educational institutions (that is government schools) account for more than 90 per cent of total enrolments in rural areas at all stages of education. However, in urban areas, the private share accounted for nearly 40 per cent of enrolment in primary classes and nearly 27 per cent enrolment in middle schools. In rural areas, the proportion of private school enrolment at the upper primary level is slightly higher in comparison with that at the primary level. The data also suggests large variations between rural and urban areas, but marginal gender difference in urban as well as rural areas. This applies to both government and private schools. Among the private schools, unaided private schools contribute to the largest share of all private school enrolment in the state. In fact, after the takeover of the private institutions by the state government during the mid-1980s, very few aided private institutions remain in the private sector. The private sector has mostly grown as unaided educational institutions.

The Unicef survey shows higher enrolment in private schools (approximately 35 per cent) than shown in the NSSO data of 52nd Round. However, it clearly establishes that the majority of SC, ST and OBC children attend government schools (Table 3.4).

Table 3.4 reveals that the percentages of boys and girls from 'Other' castes enrolled in any type of private institutions are as high as 54 and 45 respectively. Overall, half of the children from 'Other' castes were studying in private schools. Compared to this only about 20 per cent SC, 26 per cent ST and 23 per cent OBC children are enrolled in private schools. This points to the growing Dalitisation of government schools, implying that schooling of children from socially disadvantaged sections depends mostly on how

accessible and effective government schools are to them. However, it has to be noted that the Dalitisation of government schools is taking place only in terms of students and not in terms of teachers. Government schools are dominated by non-dalit teachers, who use all their social capital for remaining absent from schools up to maximum manageable periods. This has implications not only for the students enrolled in these schools but also for their overall functioning.

Table 3.4
Percentage Distribution of Enrolled Children by Caste
and Type of Institution

<i>Gender</i>	<i>Caste</i>	<i>Type of School</i>				<i>Total</i>
		<i>Government</i>	<i>Private Aided</i>	<i>Private Unaided</i>	<i>Total Private</i>	
<i>Boys</i>						
	SC	83.4	2.1	14.5	16.6	100.0
	ST	75.2	2.3	22.5	24.8	100.0
	OBC	75.7	1.9	22.4	24.3	100.0
	Others	46.1	23.1	30.8	53.9	100.0
	Total	62.8	11.8	25.4	37.2	100.0
<i>Girls</i>						
	SC	76.1	13.6	10.4	24.0	100.0
	ST	73.1	8.1	18.8	26.9	100.0
	OBC	77.6	11.5	10.9	22.4	100.0
	Others	55.0	23.8	21.3	45.1	100.0
	Total	66.7	16.5	16.8	33.3	100.0
<i>All</i>						
	SC	80.3	7.0	12.7	19.7	100.0
	ST	74.2	5.0	20.8	25.8	100.0
	OBC	76.6	6.4	17.0	23.4	100.0
	Others	50.0	23.4	26.7	50.1	100.0
	Total	64.6	13.9	21.5	35.4	100.0

Source: Unicef Survey, 1999–2000.

Further, the flight of the upper castes (who form the influential social group) from government schools also raises the concern of weakening of social pressure on the government schooling system to perform. Hence, in the light of the poor functioning of government schools in general, as reflected in terms of low retention and high dropout rates, the future of the school education of most of the children from these disadvantaged social groups hangs in extreme uncertainty. Unless the process of empowerment of the socially

disadvantaged takes place side by side, the government schooling system may witness further deterioration.

Out-of-School Children

'Out-of-school' children are those who are not enrolled in any educational institution or have dropped out between the ages of 6 and 14 years. At the outset, it is important to note that the proportion of never-enrolled children in Bihar is more than twice the all-India figure. It is remarkably high at 46.6 per cent (Table 3.5).

Table 3.5
Proportion of Never-enrolled and Dropout Children (%)

<i>Categories</i>	<i>Never-enrolled</i>			<i>Dropout</i>		
	<i>Boys</i>	<i>Girls</i>	<i>Total</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
<i>All India</i>						
Rural	21.5	31.1	26.0	5.0	6.3	5.7
Urban	10.7	13.9	12.2	4.9	5.8	5.3
R+U Combined	19.0	27.0	22.8	4.9	6.2	5.5
<i>Bihar</i>						
Rural	42.9	57.0	49.2	2.8	3.6	3.1
Urban	25.1	34.0	29.1	4.3	3.3	3.8
R+U Combined	40.5	54.0	46.6	3.1	3.6	3.3

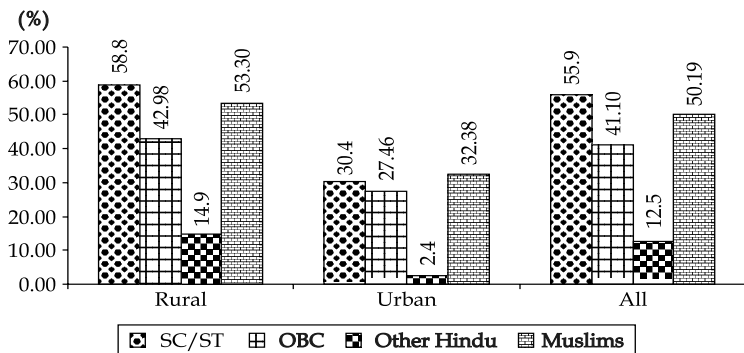
Source: NSSO, 1999.

If we combine the figures of dropouts, then the overall proportion of out-of-school children comes to almost 50 per cent in Bihar which is much higher than 28.3 per cent for India. Dropout rates for Bihar are lower compared to all-India, which, arguably, is due to a very high proportion of children in the 'never-enrolled' category. Bihar presents a classic case of low enrolments and, therefore, low dropouts.

A comparison of figures from the 42nd, 52nd and 55th Rounds of the NSSO shows a gradual declining trend in the proportion of the never enrolled. For example, for rural boys it declined from 49.7 per cent during the 42nd Round of NSSO (1986–87) to 42.9 per cent during the 55th Round (1999–2000). Though still very high, it declined among rural girls from 70.1 per cent to 54.0 per cent during the same period. However, there is a slight increase in the proportion of never-enrolled children in urban areas, both for boys

and girls, between the 52nd Round and the 55th Round. Wide variations can also be discerned across social groups. For example, the percentage of never-enrolled in rural areas among the SCs/STs and Muslims is as high as 59 and 53 respectively (Figure 3.2). This shows a strong social bias against marginalised groups which plausibly explains the high prevalence of non-enrolment of children in Bihar.

Figure 3.2
Percentage of Never-enrolled Children among Social Groups



Source: NSSO, 1999.

Besides a very high proportion of never-enrolled children, dropout at various stages of schooling is a matter of serious concern. According to NSSO estimates, about 43 per cent children dropout at various stages of schooling in Bihar. Of these, 41 per cent leave at the primary stage alone.

The dropout rates for girls are higher in rural areas but lower in urban areas compared to boys. The total magnitude of dropouts is slightly higher in the urban areas in comparison with rural areas. Overall a slightly higher percentage of girls than boys dropout. The incidence of dropout goes up at higher stages of education, both for boys and girls. There is also wide variation in dropout rates across the state. According to a DPEP data of 11 districts, the dropout rate after the first year of schooling ranges from 74 per cent in west Champaran district to 25 per cent in Darbhanga district.

In fact, a look at the figures more closely reveals that higher rates are recorded at three stages: from Classes 1–2; Classes 5–6; and Classes 7–8 (Table 3.6). The overall dropout rate is 19 per cent

from Class 1 to 2, 34 per cent from Class 5 to 6, and 46 per cent from Class 7 to 8. This is calculated by estimating a shortfall in enrolment at every next class. A plausible explanation of this trend can be attributed to overreporting of enrolments in Class 1 and various discouragements in schooling at that stage, and the distance of middle schools (Class 6) and high schools (Class 8).⁸

Table 3.6
Stagewise Dropout Rates among Boys and Girls in Rural and Urban Areas

Between Classes	Rural (%)			Urban (%)			Total (%)		
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
1-2	38.4	49.1	42.9	6.6	-0.1	3.3	19.9	17.4	18.7
2-3	29.1	15.6	24.0	-5.7	3.6	-1.0	5.5	6.2	5.8
3-4	25.5	33.9	29.0	6.4	3.7	5.1	11.0	9.6	10.4
4-5	-3.6	-2.8	-3.3	15.2	19.9	17.5	11.4	16.7	13.9
5-6	78.8	80.1	79.3	24.1	20.1	22.2	37.0	30.8	34.2
6-7	35.1	55.2	42.6	20.9	29.6	25.2	22.1	30.9	26.3
7-8	92.1	57.7	82.0	41.3	47.5	44.2	44.7	47.9	46.1

Source: Unicef Survey, 1999-2000.

Parental Response on Reasons for Out-of-School Children

The 52nd round of NSSO gives information on parents' views on reasons for their children being out of school (Table 3.7). Lack of interest in education by the child and the parent, financial constraints and, to some extent, education not considered useful appeared as major causes for children being out of school. Attending to domestic chores and, in the case of rural areas, no tradition of education act as additional factors for girls being out of school. A very small percentage of the respondents cited 'looking after younger siblings' or 'work for wages' as reasons, though these are generally perceived as important factors of non-schooling.

However, the lack of interest by parents and children should not be interpreted as a lack of motivation for schooling or that they do not value education. The Public Report on Basic Education (PROBE) found that there was no dearth of motivation among parents for education of their children, both boys and girls. The problem lies with the open contempt that parents often have for the schooling system. Parental hopes often meet with frustration when they observe that even after several years of schooling their children learn very little.

Table 3.7
Percentage of Non-enrolled Children (Age 6–14) by Reason

<i>Reason</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
No Tradition of Education	2.7	6.1	4.2	1.7
Child not Interested	14.4	11.3	18.7	13.4
Parents not Interested	34.6	37.2	17.4	26.2
Inability to Cope or Failure in Studies	–	–	–	–
Unfriendly Atmosphere at School	–	–	–	–
Education not Useful	4.4	6.2	2.2	4.2
Education Facility not Available	1.2	1.6	–	0.2
Work for Wage	1.3	0.5	1.1	–
Participation in Other Economic Activities	2.1	0.4	0.9	2.2
Looking after Younger Siblings	0.3	0.7	–	1.2
Attending other Domestic Chores	1.0	3.9	–	2.5
Financial Constraints	24.4	19.1	21.5	20.9
Completed the Desired Level	–	–	–	–
Awaiting Admission	–	–	–	–
Others	13.7	13.1	34.0	27.6

Source: NSSO, 1995.

Social Discrimination

Apart from low literacy and low levels of enrolment in schools, there existed a strong social bias against schooling of children from socially disadvantaged groups, particularly Dalits. Despite some positive achievements by the state in school education, the Dalits are at the lowest rung. The NSSO 55th Round reports 25 per cent literacy among Dalits as against more than 60 per cent among upper castes in 1999–2000. Female literacy among Dalits is as low as 12 per cent in rural areas. The level of literacy in different age groups shows that among Dalit children literacy is approximately 40 per cent with nearly two-thirds of Dalit children being out of school.

Many field based qualitative surveys have brought out detailed descriptions of the processes of exclusion of Dalit children in particular (Box 3.1). Out of these the practice of untouchability is the most striking. A study report of ActionAid India (2002) finds that out of 52 sample villages in Bihar, untouchability was in practice between non-Dalit and Dalit students in 19 villages. However, untouchability was also found being practiced between

Dalit students and non-Dalit teachers in six villages and between Dalit and non-Dalit teachers in 10 villages.

Box 3.1 Untouchability in Schools

In Manikpur, in 1992–93, Rinku, a Dalit girl of Dhobi caste, was not allowed to cook as part of her coursework, which was in her school curriculum of Class 7 because she was a Dhobi (caste of washermen).

When the members of the research team went to a school in Maheshmara, district Deoghar, they did not observe anything discriminatory at first glance and the teachers tried their best to project the secular image of the school. However, when the researchers met Santosh Kumar Turi, a Dalit student of Class 5, separately, he said that he was lying in front of Didiji (a lady teacher). In fact, when she had tea/snacks while taking classes, she asks Dom/Turi children to keep away. '*Us samay hum unke pas nahin ja sakate hain, kehti hain: Dom ho, Kuch to saram haya karo*' [That time we can not go near to her, she will say you people are Dom (Dalit) you should be ashamed of this and keep away. She also does not accept a glass of water from our hands and will ask us not to touch the hand pump.] (ActionAid India, 2002).

A similar situation is reported by an NGO, Samajik Shodh Ewam Vikas Kendra (SSEVK), working among Musahars and other Dalit castes in the district of east Champaran, in one of its reports of 2002. It shows that across approximately 20 villages in Mehsi block no child of the lower community is educated above the primary level. The upper castes do not like dalit children attending schools along with their children (Box 3.2).

Thus given the high percentage of Dalit population in the state, their enrolment and dropout has a direct bearing on the slow progress of school education in Bihar. Informal but dominant institutions of untouchability and covert/overt discrimination contribute either to non-enrolment or distress dropout. Apart from other institutional measures to increase the enrolment and retention rates, a crucial area of intervention has to be social mobilisation against explicit/implicit forms of social discrimination practised and preached against the marginalised social groups.

Box 3.2
Social Discrimination and Low Level
of Educational Development

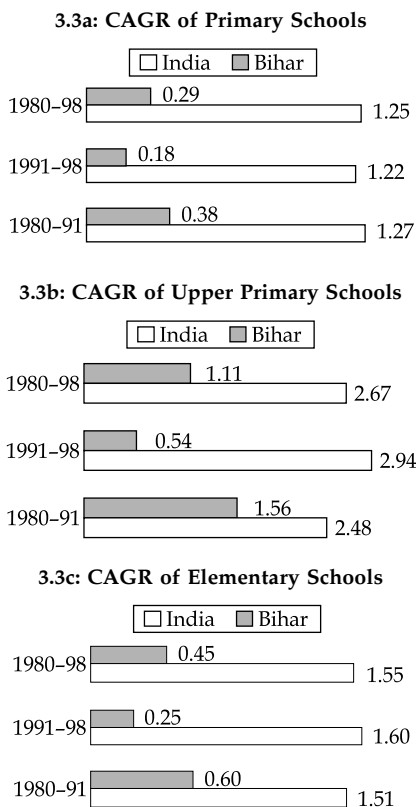
Village Madhopur Kesho is located on the banks of the river Gandak in Rejepur panchayat of east Champaran district. Approximately 200 Musahar families reside in the southern part of this village. Among all these only one girl (Anju Devi) is educated up to Class 9. She is also a volunteer in an alternative education centre being run by a local NGO called SSEVK. Anju Devi wants to educate all children of her community. However, she faces various kinds of hurdles created by people of other castes. Some upper-caste people promised the children that they would give them free wheat if the children did not go to school; others offended them by saying that '*padh likhkar kya karoge, kam karoge tabhi to khana milega*' (What will you get by studying, if you work at least you will get food). There are also some persons who are straightforward in saying that '*ye sab padh likh jayega to hamara kam kaun karega*' (If all of them become educated then who will work for us). Anju Devi also complains about other kinds of oppression such as beating of Dalit school-going children by upper-caste children and also teachers on various pretexts.

Growth of Educational Institutions

The universalisation of elementary school depends also on the number of educational institutions within a region. The growth of a number of schools, particularly in rural and far-flung areas makes access to schools easy for many disadvantaged groups. At the all-India level, the numbers of primary and upper primary schools have increased at a Compound Annual Growth Rate (CAGR) of 2.3 and 5.7 per cent respectively between 1951 and 1998–99. The growth rates, however, slowed down during the 1980s and 1990s to around 1.25 per cent for primary and 2.5 per cent for upper primary schools. In Bihar, growth has been substantially lower compared to the national level for both primary and upper primary schools. Figure 3.3 shows that between 1980–91, the growth of elementary education in Bihar has been at the CAGR of 0.6 per cent. However, even this slow growth rate further slowed down during 1991–98 to 0.25 per cent.

Moreover, the growth of primary schools has been slower than growth in upper primary schools during both the periods. The CAGR of primary schools has been 0.38 per cent during 1980–91 and 0.18 per cent during 1991–98. Corresponding figures for upper primary schools have been 1.56 per cent and 0.54 per cent.

Figure 3.3
CAGR (%) of Growth of Schools in India and Bihar



Source: Selected Educational Statistics (1998–99).

The absolute number of institutions at primary and upper primary levels in India and Bihar is presented in Table 3.8. Owing to a faster growth rate in upper primary schools, the ratio of primary to upper primary schools has come down from 4.17 in 1980–81 to

3.29 in 1997–98. However, the spatial variation in terms of ratio of primary to upper primary schools across districts remains high. In some of the districts there are more than five primary schools for one upper primary school.

Table 3.8
Number of Primary and Upper Primary Institutions

Category	Number of Institutions		
	1980-81	1990-91	1998-99
All India			
Primary	494,503	560,935	626,737
Upper Primary	118,555	151,456	190,166
All	613,058	712,391	816,903
Ratio of Primary to Upper Primary	4.17	3.70	3.29
Bihar			
Primary	50,980	52,932	53,697
Upper Primary	11,289	13,184	13,761
All	62,269	66,116	67,458
Ratio of Primary to Upper Primary	4.52	4.01	3.90

Source: Selected Educational Statistics (1998–99).

Although there is provision for opening an *angadwadi* in every village, such a centre is functioning in only a few villages. Further, girls' schools are available only in a few villages. The schools within most of the villages are meant for boys, many of which are now converted into co-educational institutions because of increasing enrolment of girl students. However, it becomes extremely difficult for girl students to attend middle and higher level school as there is no girl's school of that level available within, or in the vicinity of, their villages. The non-availability of middle or higher level schools within or in nearby villages is seen as one of the most important factors that discourage girls from attending school in these villages (Box 3.3).

The growth of educational institutions has failed to match the population growth rates⁹ in Bihar. At the same time, the growth of primary and upper primary schools has lagged far behind the growth in enrolment in primary and upper primary classes. As per *Education in India, 1980–81 and 1985–86*, and *Selected Educational Statistics, 1990–91 and 1995–96* total enrolment in primary classes went up to 9.086 million in 1995-96 from 6.697 million in 1980–81.

During this period only 2,240 primary schools have been added in the state. This has serious implications for the capacity of the schooling system in terms of enrolment, retention and quality of education.

Box 3.3

Non-availability of Upper Stage Schools and Girls' Education

'All girls in our community (Chamar) are married by the time they reach 14 years of age. Moreover, there is no middle school in our village. We can not send our girls to other villages (for schooling). The environment is not conducive. If they can not continue after the primary level what is the benefit of getting them educated up to that level (primary level). We may send our girls to middle school if there was one within the village but there is none. Boys go to other villages for middle school but the girls do not' (focus group discussion with Chamar (SC) community in village Bhokhila, district Nalanda—Sharma et al., 1999).

'We can not send our girls outside this village to study. It is a question of honour and respect in our community' (focus group discussion with Rajput community in village Alalpur—Bishunpur, district Gaya—Sharma et al. 1999).

Regarding growth of private schools in the state, there is a dearth of reliable figures about total number of private schools providing elementary education in the state. Since most of the private schools are unrecognised and unaided, the education department does not keep their records. The all-India educational surveys of the National Council for Educational Research and Training (NCERT) depend on the information provided by the education department, hence they give data only of aided private schools which are presumably a minuscule part of the entire private sector schooling. Thus, enrolment in private schools can be considered a proxy indicator of the extent of private schooling in the state.

School Infrastructure

Proper school infrastructure creates conducive conditions for education. This relates to basic facilities of classroom (and within-classroom facilities like blackboard, chalk, duster, teaching aids), drinking water, toilets and so on. The Unicef survey shows that apart from shortage of schools, there is also a lack of adequate

infrastructural facilities to accommodate and attract children in government schools. As shown in Table 3.9, only about 90 per cent of government schools had two classrooms or more. Drinking water (by any source) was available only in 72 per cent government schools in rural areas and 90 per cent government schools in urban areas. The most pathetic is the non-availability of toilets in government schools. Boys' toilets were available only in 14 per cent schools in rural and 3 per cent schools in urban areas. Girls' toilets were available in 14 per cent schools in rural areas and 15 per cent schools in urban areas. Private schools seemed to have better infrastructure in all respects except for girls' toilets in rural areas.

Table 3.9
Percentage of Schools with Basic Facilities by Type of Institution

<i>Types of facilities</i>	<i>Rural/Urban</i>	<i>Government</i>	<i>Private</i>	<i>Total</i>
Two Classrooms or more	R	88.9	100.0	89.5
	U	90.3	100.0	95.5
Drinking water (any source)	R	72.2	100.0	73.7
	U	93.9	90.3	92.8
Drinking water (hand pump)	R	69.4	100.0	71.1
	U	66.7	58.1	62.3
Boys' toilet	R	13.9	50.0	15.8
	U	3.0	19.4	13.0
Girls' toilet	R	13.9	0.0	13.5
	U	15.2	32.3	26.1

Source: Unicef Survey, 1999–2000.

Note: R: Rural.

U: Urban.

Number of Teachers

The growth in enrolment is not matched by growth in the number of teachers. While over a long period, the compound annual growth rate (CAGR) of the number of enrolled children has been 3.40 per cent between 1980–81 and 1997–98, the corresponding figure for the CAGR of number of teachers has been only 0.37 per cent (Table 3.10). Whereas the addition in enrolment in primary classes between 1980–81 and 1999–2000 has been approximately 3,800,000 students, only 4,706 teachers have been added. Consequently, the pupil–teacher ratio went up in Bihar from 60 to 90, which is the highest in the country (the closest being West Bengal with 57). The all-India average for pupil–teacher ratio stood at 42 only.

In order to achieve even the all-India average of the pupil-teacher ratio the present strength of the number of teachers is required to be doubled which means an additional number of 116,000 teachers at the primary level alone. According to the Expert group on Financial Requirements for Making Elementary Education a Fundamental Right the requirement of additional teachers at the primary level is more than 340,000 (MHRD, 1999b).

Table 3.10
Pupil-Teacher Ratio

Categories	1975-76	1980-81	1985-86	1990-91	1995-96	1999-2000	CAGR %
							(1997-98 over 1980-91)
Number of Teachers	106,800	111,172	111,264	117,641	118,185	115,878	0.37
Number of Students (million)	4.917	6.697	8.049	8.565	9.086	10.473	3.40
Pupil-Teacher Ratio	46	60	72	73	77	90	3.02

Source: Selected Educational Statistics, 1997-98.

Even though the Unicef survey shows the pupil-teacher ratio as 60 in rural areas and 53 in urban areas in government schools, these figures too suggest an acute shortage of teachers in government schools, particularly in rural areas. This has resulted in wide prevalence of single- and two-teacher schools, particularly in rural areas, and, consequently, multi-grade teaching. Single-teacher schools virtually get closed down in the absence of the teacher. The proportion of single- or two-teacher schools is very high in Bihar in comparison with other states. About 16 per cent schools are single-teacher schools and another 50 per cent are two-teacher schools in rural areas. A small proportion of schools in rural areas have three or more teachers at primary levels. The situation is somewhat better in urban areas (Table 3.11).

The problem of high pupil-teacher ratio in Bihar is associated with two factors. One, the number of sanctioned posts is inadequate to provide every primary school with at least three teachers and second, even a substantial number of sanctioned posts remain

Table 3.11
Teachers in Primary Schools (%)

States	Rural			Urban				
	Single Teacher	Two Teachers	Three Teachers	> 3 Teachers	Single Teacher	Two Teachers	Three Teachers	> 3 Teachers
A.P.	2.5	20.0	22.5	55.00	4.0	16.0	20.0	60.0
Assam	7.5	40.0	25.0	0.0	0.0	3.1	3.1	93.7
Bihar	15.6	50.0	15.6	18.8	8.9	13.3	8.9	68.9
M.P.	21.6	37.8	21.6	18.9	4.9	4.9	12.2	78.0
Rajasthan	0.0	47.8	8.7	43.5	10.5	5.3	2.6	81.6
T.N.	8.1	43.2	13.5	35.1	0.0	11.8	2.9	85.3
U.P.	12.1	53.0	19.7	15.2	1.5	18.5	20.0	60.0
W.B.	0.0	21.2	45.5	33.3	4.8	7.1	16.7	71.4

Source: Unicef Survey, 1999-2000.

vacant for long periods because of non-recruitment of new teachers. The problem is much more serious in rural areas. In this regard the Comptroller of Auditor General of India Report (CAG Report, 2000) takes a serious note of the shortage of teachers in schools in Bihar (Box 3.4).

Box 3.4
Shortage of Teachers in BEP Schools

As on 31 March 2000,

... of 1.11 lakhs (.111 million) sanctioned posts in 32.5 thousand primary schools of the project area, only 94 thousand teachers were in position and 16 per cent (17,280) of posts were vacant. Further 23 per cent (7,357) of schools had single teacher and 298 schools were without teachers. Pupil-teacher ratio varied widely in the schools. Of 32,554 schools, 5,014 (15 per cent) schools had one teacher for more than 100 students as against the norm of 1:50. Gaya and Bhagalpur districts were most [sic] sufferers in this regard (CAG Report, 2000).

Further in the year 1999-2000, out of the total posts sanctioned/planned of 5,690 primary school teachers only 516 were filled up, leaving a shortfall of 5,174 teachers. Accordingly, against 1,581 sanctioned/planned posts of cluster teachers no appointment was made.

Accordingly the Unicef survey also notes that about one-fourth of sanctioned posts were lying vacant in the year 1998-99. This has serious repercussions on the quality of teaching and learning. It is widely acknowledged that the proportion of female teachers has positive links with the enrolment and retention of girls. As per the Sixth All-India Educational Survey (AIES) the proportion of female teachers was approximately 20 per cent of the total. The proportion further improved through 1998-99, as is evident from the Unicef survey, and has gone up to more than 30 per cent in rural and approximately 50 per cent in urban areas.

According to the Unicef survey private schools definitely showed a better pupil-teacher ratio—18 in rural areas and 25 in urban areas. However, given the fact that only a privileged minority of children (maximum 35 per cent) attend private schools, this brings no succour to the children of the poor and the disadvantaged social groups who overwhelmingly attend government schools.

3. PRIVATE SCHOOLING

Private schools have registered phenomenal growth during the last decade in Bihar. According to the estimate by the Unicef survey, almost 35 per cent of children attend them. However, as pointed out by Kingdon (1996), there is still no clear understanding about the role, size and equity effects of private sector schooling.

PROBE (1999) identifies two favourable conditions for the emergence and growth of private schools in India: (a) the breakdown of government schools and (b) parental ability to pay. Even at the primary level many children belonging to rural areas attend private schools located in urban areas (Reddy, 1991). Because of the deterioration in the quality of publicly financed schools, private (convent) schools are coming up even in remote areas. Serious doubts have been raised regarding their net effect in the society. Tilak (2001) finds that private schools may aggravate the already existing inequalities along lines of gender and caste. PROBE also finds that private schooling is out of reach of the vast majority of poor parents who cannot afford tuition fees and other expenses (Box 3.5).

Private schools are generally perceived as providers of quality education. In the parents' perception, the main advantage of private schools is that being more accountable, they have higher levels of teaching activity (PROBE, 1999: 102). A wide-ranging study conducted by the Institute for Human Development (IHD) based on a socio-economic survey in 36 villages of Bihar finds that across the state parents associate two distinct features of education with private schooling. One, in general the cost of schooling is higher in private schools and two, private schools generally have active class room activities (Sharma et al., 1999). However, most of the parents are of the opinion that they send their children to private schools only because the government schools are always short of teachers and children do not get quality education in government schools.

The government set up the primary school—but forgot to tell the teachers to come to teach! The rich households—Brahmin, Teli, Suri, and Dhanuk send their children to a private school in Basopatti (6 km away). Most of us do not send our children to school. A few send their children to a government school in

Basopatti—but what is the use? The teaching there is only marginally better than here (village Jhitki, district Madhubani).

Box 3.5
Access to Private School

We have two schools. First one is a government primary school in Ballapur and the other a private academy. Only Bhumihar (upper caste) children go to the latter. Children from all lower caste groups can be found in the former. In any case very few of our children (Musahar—a lower caste) go to school. We are poor. We can send our children to school, but how can they study when their stomachs are empty (focus group discussion with Dalit women in village Darveshpura, Nalanda district).

'There is one primary and middle school in the village, but most of the rich educate their children in private schools outside the village. They pay between Rs 30–50/month. That is why they can get better jobs' (focus group discussion in village Baraandi, Nalanda district).

There is one primary school in this village. It does not have a building and is at present running within the compound of a Yadav household. Teachers do not teach properly here. Fifteen to twenty of the richer households send their children to a private school in the next village, paying Rs 30 per month for primary classes and Rs 60/month for higher classes (focus group discussion in Anhar, Rohtas district) (Sharma et al., 1999).

The Unicef survey underlines an impressive pupil–teacher ratio in private schools—18 in rural areas and 25 in urban areas. Though they have only 23.5 per cent graduate teachers in rural areas as compared to 40 per cent in government schools, in urban areas the situation is the opposite with 100 per cent of private schools having graduate qualified teachers as compared with 82 per cent of government schools. However, government schools have an edge over private schools in terms of availability of trained teachers. Only 60 per cent private teachers in rural areas and 40 per cent in urban areas are trained compared to almost 100 per cent trained teachers in the government schools. There is also a greater percentage of female teachers in government than in private schools. In the case of private schools, most trained teachers at the primary level are temporary in both rural and urban areas.

A large number of teachers both in rural and urban areas report the need for additional support in order to improve their teaching abilities, according to the Unicef survey. In Bihar, a comparatively higher proportion of teachers from government schools in rural areas reported the need for an 'upgrading subject knowledge'. Similarly, most of the teachers requiring help with 'new teaching techniques' are from government schools. In the case of rural areas, almost no such support is available for either the government or private schools. In urban areas, however, the upper primary and elementary levels are favourable for receiving a large amount of support for both government and private schools. In the 17 DPEP (BEP) districts Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs) have been set up to impart in-service short term training to teachers (Box 3.6).

The BEP, based on the principle of 'teacher first', has been implementing a highly innovative teacher training programme UJALA which addresses issues of skill and personality development of teachers. Keeping in view the main issue before the primary teachers in children of Classes 1 and 2 and based upon the experience of UJALA a ten-day module UJALA I was developed. Considering the needs of the children of class III to V UJALA II was also developed in the year 1998. Up to 2000–2001 out of a total 92,173 teachers in the BEP schools 84,649 have been imparted training under UJALA I and 47,725 under UJALA II.

Box 3.6
BRCs and CRCs in DPEP (BEP) Districts

Resource centres have been set up at block (BRCs) and cluster (CRCs) levels, 10–12 schools comprising 35–40 teachers hold one-day monthly meetings; in fact it is a sort of one-day recurrent training for teachers. These teachers select a coordinator among themselves. These coordinators organise monthly meetings of teachers at CRCs and provide academic support at CRCs as well as at schools. The difficulties that they face during their academic support are to be collected and discussed at BRC monthly meetings. In these meetings BRC's resource persons also participate and they are expected to provide academic support to some chosen academically poor schools. Teachers are given 10 days in-service training yearly at BRCs in which all aspects of curriculum transactions are discussed (Bihar Shiksha Pariyojana Parisad, Annual Report, 2000–01. Patna: Government of Bihar).

The average salary of teachers in private schools is one-tenth of that in government schools, and with a high coefficient of variance (40 to 90 per cent). The Unicef survey found the average annual salary in private schools between Rs 7,846 in rural areas and Rs 10,462 in urban areas in elementary schools. Most of these schools have no rule of salary payment. All these factors must affect the quality of education in private schools.

A greater proportion of government schools has *pucca* buildings compared to private schools, though the difference is much less in urban areas as compared to rural areas. In terms of the number of rooms available, private schools are much better than government schools with 89 per cent rural and 90 per cent urban private schools having more than three rooms at the elementary level, as compared to 34 per cent of rural and 51 per cent of urban government schools. In rural areas, there is no difference between government and private schools in terms of having a single classroom. In urban areas, nearly all private schools have more than two classrooms, while approximately 10 per cent of government schools in the urban areas are single-room schools. Differences can also be seen in terms of maintenance and quality of the available infrastructure. In most of the government schools, the walls and roofs are in a dilapidated condition due to lack of proper maintenance. The toilets are not in usable condition and are unhygienic. On the contrary, better maintenance of buildings and classrooms in private schools makes them attractive. It is only in the facility of toilets for boys and girls where private schools, like government schools, are badly lacking.

4. FINANCING OF ELEMENTARY EDUCATION

The state as well as households both finance elementary education in India. Panchamukhi (1989) observes that the two are so interrelated and interdependent that, in the absence of either, there is likely to be underallocation of resources on education. In this and the next section we will analyse the size and trends of both of these types of expenditure on elementary education.

Public Expenditure on Elementary Education

Overall, the state government spends a high percentage of its budgetary allocation on the education sector. There has been a

consistency in the level of spending on education. Figures have ranged between 20 per cent in 1980–81 and about 25 per cent in 1998–99. The intra-sectoral allocation in education is favourably inclined towards elementary education. It receives approximately 70 per cent of the total budgetary allocation for education. The national figure for the share of elementary education to total education expenditure was only 48.7 per cent in 1998–99. In fact, the Bihar figure is higher than that of any major state in the country. Another significant trend in this regard has been the consistency of Bihar, since 1980–81, in maintaining the level of education expenditure and the share of elementary education. The annual average growth rate of public expenditure on elementary education has been 12.7 per cent during the period 1980–81 to 1998–99. Maintaining this consistency for elementary education despite financial constraints has resulted in negative growth rates for expenditures on higher and technical education.

Another important indicator is the percentage of Net State Domestic Product (NSDP) spent on elementary education. Close to 6 per cent of NSDP was spent on elementary education, which is only next to Assam and Himachal Pradesh. The national average is only about 4 per cent.

Bihar witnessed a virtual stagnation in education expenditure during the early 1990s (Pushendra, 2001). The growth rate of expenditure in the education sector in general was negative (-0.3 per cent) between 1990–91 and 1995–96, whereas the corresponding national figure was 3.4 per cent. However, in the period 1995–2000 the expenditure on education in Bihar increased substantially with an overall positive growth rate of expenditure on education in general, and elementary education in particular, during the 1990s, probably on account of DPEP spending. The trends in actual expenditure on current prices on elementary as well as total education for the period 1980 to 2000 is presented in Table 3.12.

In 1999–2000 although the increase in the total budget size of the state itself contributed to the increase in expenditure on education in the state, the percentage share going to the education sector declined further in 1999–2000 leaving the figure at the lowest during the 1980s and 1990s. Further it is important to note that although the percentage share of the total budget going to education is substantially higher in Bihar (more than 20 per cent) than

in all-India (11 to 12 per cent), the share has been declining since the middle 1980s from more than 24 per cent in 1985–86 to close to 21 per cent in 1999–2000.

Table 3.12
Trends in Expenditure on Elementary and Total Education
in Bihar (Current Prices)

Year	<i>Total Expenditure (Rs million)</i>			% of Elementary to Total Education	% of Total Education to Total Budget
	<i>Elementary Education</i>	<i>Total Education</i>	<i>Total Budget</i>		
1980–81	1,508.8	2,052.0	8,994.1	73.53	22.81
1985–86	3,142.5	5,120.9	20,980.4	61.37	24.41
1990–91	7,510.8	11,981.6	48,877.0	62.69	24.51
1995–96	13,025.8	19,166.5	84,561.7	67.96	22.67
1999–2000	29,212.3	42,104.8	195,481.9	69.38	21.34

Source: NCERT (2002). *Education Statistics*, New Delhi, for 1999–2000 RBI (2002). *Reserve Bank of India Bulletin*, Mumbai.

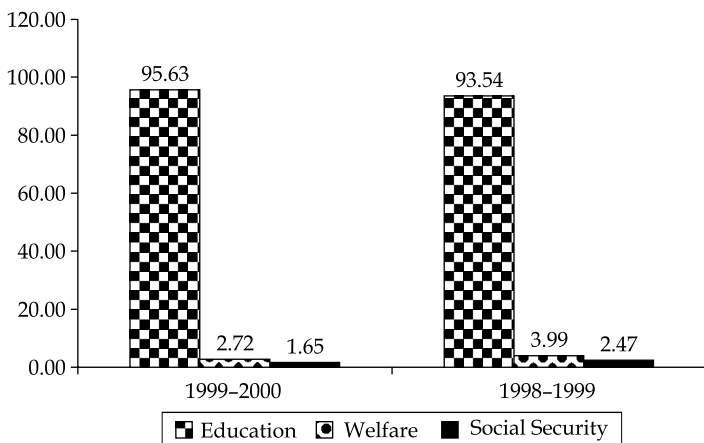
Department-wise Expenditure

The Department of Education is the main department through which major spending in the education sector is done. However, there are a few more departments in the state government, which also spend, under some special programmes, for educational development. In Bihar, other than the Department of Education, the Department of Welfare incurs expenditure on educational development of the SCs, STs, and OBCs. Departments of Social Security and Public Works are also involved in financing the education sector in indirect ways. However, the share of the departments other than the Department of Education is very low. Figure 3.4 presents the proportionate share of three important departments to total expenditure on education in the state.

Although we have not taken figures of expenditure by some other departments, the proportion of their expenditure on the total education sector is very low. Moreover, data related to expenditure on elementary education is not easy to separate from total expenditure on education within those departments. Their expenditure on education is more or less sporadic and ad hoc in nature.

Hence, in this section, unless mentioned otherwise, we will concentrate only on the expenditure by the Department of Education.

Figure 3.4
Proportion of Expenditure by Different Departments
in Total Expenditure on Education



Source: Finance Account, 2000.

Most of the educational expenditure (close to 99 per cent) by the Department of Education is in the form of revenue (that is recurrent) expenditure, though it is widely agreed that capital expenditure is not captured well in the present classification of heads of expenditure. Capital expenditures often come in the form of ad hoc grants to educational institutions or, as in recent years, incurred under Rural Development Schemes and by the Public Works Department.¹⁰ The macro scenario regarding public expenditures in the 1990s can be characterised by a decline in the share of capital expenditure and rise in the share of non-development expenditures (Mahendra Dev and Mooij, 2002).

Expenditure on education is funded also by external assistance, provided either through central schemes such as 'Joyful Learning' or through state programmes such as the Education for All programme (or DPEP). DPEP funds are made available directly through a state implementing agency, BEP, and these transfers

are not reflected in the state budget (except for the state component which is shown in the budget).¹¹

Intra-sectoral Division of Expenditure

The expenditure on general education has six sub-sectoral divisions including elementary education. Within the elementary education division is primary and middle education. Elementary education has the largest share of total revenue expenditure on general education which reached 68 per cent in 1999–2000. In fact, the proportion of elementary education to total revenue expenditure on education is one of the highest among major states. In states such as AP and TN the proportion is less than 50 per cent. In WB, this is 30 per cent (on primary only, excluding upper primary).¹² The next largest contributors are 'secondary education' and 'university and higher education', which are approximately 20 per cent and 10 per cent of the total revenue expenditure on general education. Adult education, language development and general/research together form a meagre 2 per cent (approximately) of the total revenue expenditure on education. Technical education is not part of general education and in the budget document it is treated separately and is under a different department in the state government. A yearwise break-up of total revenue expenditure on education by sub-sectors is presented in Table 3.13.

Table 3.13
Share of Sub-sectors within General Education (Revenue Account) (%)

Year	Elementary Education	Secondary Education	University/		Language Development	General/ Research
			Higher Education	Adult Education		
1990–91	65.96	18.90	10.86	1.78	2.09	0.42
1991–92	65.70	20.94	11.12	1.04	0.80	0.39
1992–93	64.19	20.59	11.99	1.23	1.62	0.38
1993–94	64.61	21.33	12.00	0.25	1.46	0.34
1994–95	66.86	20.34	9.81	0.56	2.15	0.28
1995–96	68.26	19.61	9.75	0.63	1.45	0.28
1996–97	66.86	19.48	11.04	0.53	1.79	0.30
1997–98	66.62	20.13	10.92	0.22	1.86	0.26
1998–99	66.21	19.65	12.41	0.16	1.29	0.29
1999–2000	68.40	19.85	11.75	0.00	0.00	0.00

Source: Government of Bihar (various years). *Finance Account*, Patna.

Trends in Revenue Expenditure During the Post-reform Period

After allowing for inflation, real education expenditure declined during the early post-reform period (between 1990–91 and 1994–95) and thereafter registered an increase, growing at an average rate of approximately 2 per cent between 1990–91 and 1999–2000. These are among the lowest growth rates registered by Indian states during the 1990s.¹³

The proportion of revenue expenditure on education to total revenue expenditure of the state has also shown more or less a declining trend with minor fluctuations. This proportion has declined from more than 26 per cent in 1990–91 to 22 per cent in 1998–99, and thereafter increased to 24 per cent in 1999–2000. Similarly, the share of elementary education in total revenue expenditure also shows a decline of approximately the same proportion. It decreased from near 17 per cent in 1990–91 to 14 per cent in 1998–99 and finally increased to approximately 16 per cent in 1999–2000 (Figure 3.5).

The share of expenditures on general education to NSDP does not show much fluctuation and has been in the range of 5 to 6 per cent. However, for elementary education, the share shows a marginal increase of less than 1 per cent. This implies that during the 1990s, the growth rate of NSDP and expenditures on general education and elementary education have largely been the same.

In terms of per capita expenditure on education, there was a net decline in the expenditure on general education and elementary education during the 1990s. At 1990–91 constant prices, the per capita expenditure during the 1990s declined at an average annual rate of 2 to 3 per cent for most of the years. It is only at the end of the decade that the expenditure on general and elementary education increased abruptly and, hence, the growth rate shows a positive result at around 1 per cent.

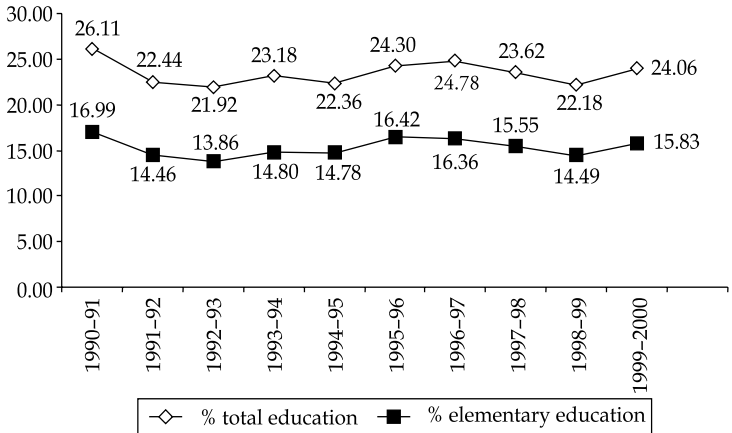
The real per capita expenditure in 1990–91 was Rs 148 and Rs 97 for general education and elementary education respectively, which fell to Rs 121 and Rs 80 respectively in 1998–99. In the year 1999–2000, the per capita expenditure showed an abrupt increase largely because of increase in non-plan expenditure on payment of a large sum of salary arrears to teachers in the light of salary revision (Figure 3.6). If this component is taken out from the total

expenditure, the per capita expenditure shows either a decline or approximately no increase in 1999–2000.

During the 1990s (except for 1990–91 and 1999–2000), the per capita expenditure on general and elementary education has been around Rs 120 and Rs 80 respectively at 1990–91 prices.

Figure 3.5

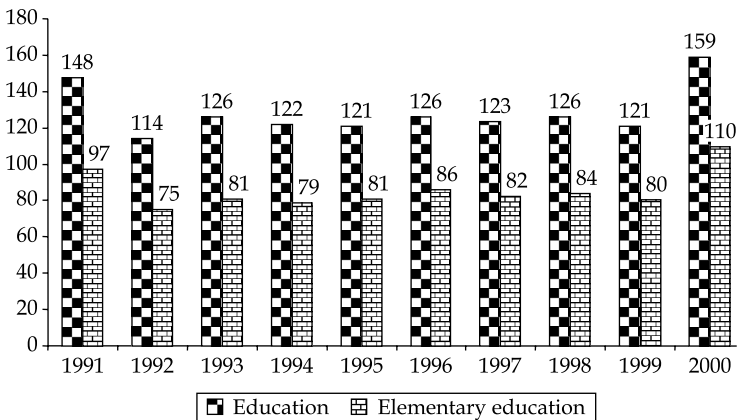
Percentage Share of Revenue Expenditure on General Education and Elementary Education in Total Revenue Expenditure (1990–91 to 1999–2000)



Source: Finance Account, 2000.

Figure 3.6

Per Capita Expenditure (Rs) on General and Elementary Education (1990s)

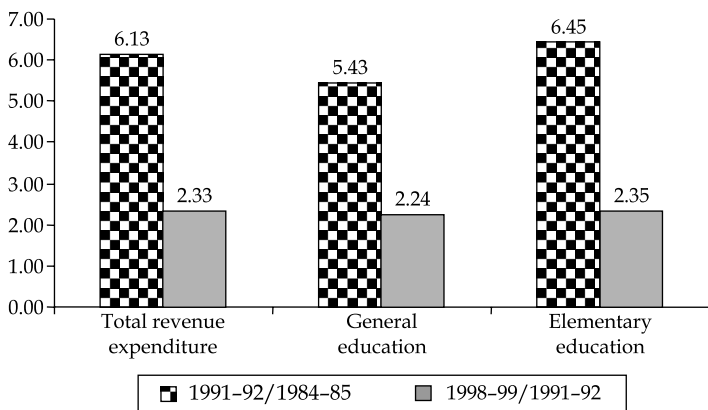


Source: Same as Table 3.13.

Growth rates of real expenditure on total revenue account, general education, and elementary education have been calculated and presented in Figure 3.7. The period of 1984–85 to 1991–92 has been taken as reference for the pre-reform period and 1991–92 to 1998–99 as the post-reform period. The growth rates are significantly lower during the post-reform period in comparison with those during the pre-reform period.

Figure 3.7

CAGR (%) of Real Expenditure (1984–85 to 1991–92 and 1991–92 to 1998–99)



Source: Same as Table 3.13.

Plan and Non-plan Expenditure

Generally, plan expenditure by the state reflects expenditure on new schemes, while non-plan expenditure shows expenditure of a recurring nature (for example old schemes). All the schemes under the plan expenditure on education can be divided into three major parts on the basis of expenditure shares between state and centre:

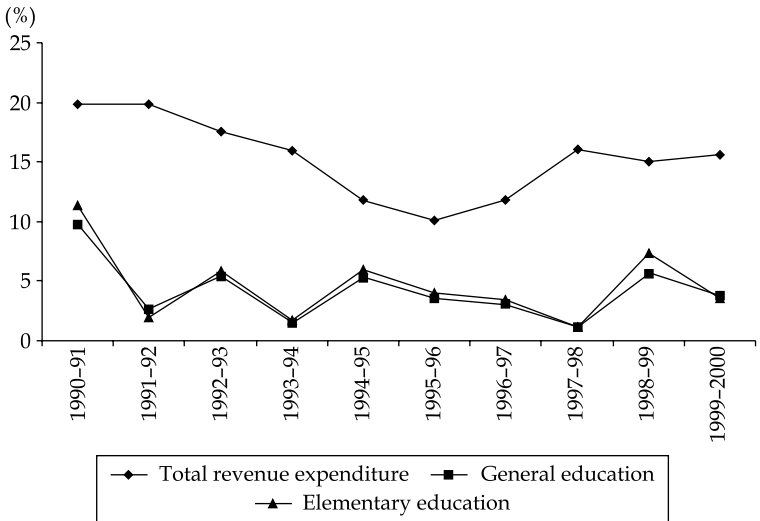
1. State plan: This includes schemes such as (a) extension of services of teachers; (b) Urdu teacher unit; (c) DPEP III teacher unit; (d) incentive allowance; and (e) appointment of para-teachers
2. Central government Sponsored Schemes (CSS): These include (a) Sarva Shiksha Abhiyan; (b) Education Guarantee Scheme; and (c) non-formal education (NFE)

3. Central Schemes (CS): These are the centre's own schemes
 (a) Eleventh Finance Commission; and (b) Pradhan Mantri Gramodaya Yojana (PMGY)

Under plan expenditure, the important schemes in operation in 1999–2000 were Operation Blackboard, NFE, Teacher Training Programme, District Primary Education Programme (DPEP) and Incentive Programmes.

In Bihar, the proportion of plan expenditure in general is much lower in comparison with other states. The proportion of plan expenditure on education in Andhra Pradesh (AP) and Uttar Pradesh (UP) is approximately 10 per cent, while in Bihar the proportion is 3 to 4 per cent. During the pre-reform periods, in the 1970s and 1980s, the proportion of plan expenditure was in the range of 5 to 10 per cent, which subsequently declined to 3 per cent in 1999–2000 (Figure 3.8).

Figure 3.8
The Proportion of Plan Expenditure (per cent)



The proportion of plan expenditure on elementary education shows high fluctuations with a declining trend over the years. Within general education, the proportion of plan expenditure for different sub-sectors to total revenue expenditure of that sub-sector

for the period 1990–91 to 1999–2000 is presented in Table 3.14. Out of these six sub-sectors, adult education is largely a plan scheme for which funds come from the centre. Except this, in the rest of the sub-sectors normally less than 5 per cent revenue expenditures are under plan expenditure.

Table 3.14
Proportion of Plan Expenditure (Revenue) in Sub-sectors
of General Education (%)

Year	Elementary Education	Secondary Education	University/		Language Development	General/ Research
			Higher Education	Adult Education		
1990–91	11.3	2.1	2.3	86.6	4.6	19.0
1991–92	2.0	0.8	1.4	94.3	0.9	3.0
1992–93	5.8	0.9	4.1	80.0	0.2	1.0
1993–94	1.7	0.6	0.6	76.5	0.1	0.4
1994–95	6.0	0.2	7.4	100.0	0.0	0.2
1995–96	4.0	0.0	2.2	95.3	0.2	0.4
1996–97	3.4	0.0	3.1	98.2	0.2	0.0
1997–98	1.2	0.0	1.1	94.6	1.0	0.2
1998–99	7.3	0.0	4.7	94.5	0.6	0.1

Source: Same as Table 3.13.

Although the share of non-plan expenditure has been increasing over the years in almost all the states, the trend has been abnormally high in Bihar. Apart from other reasons, non-utilisation of outlay on many plan schemes can also be attributed to this trend. We will come back to this concern later.

We have seen above that plan revenue expenditure accounts for only a negligible part of the total revenue expenditure on elementary education. More than 95 per cent of the total revenue expenditure is non-plan. Expenditure details are available through state appropriation accounts, as mentioned in Table 3.15.

Almost the entire amount under non-plan is spent on salary, leaving negligible amounts for other items, particularly consumables under material and supplies, incentives such as stipends and so on (see also Pushpendra, 2001). The two facts—meagre plan expenditure and about 99 per cent non-plan expenditure on salary—explain the sorry state of affairs of educational development in Bihar.

Thus, Bihar presents a typical picture of a poor state where despite high proportional allocations to education, the current level of investment is grossly insufficient. Almost all funds are being spent on salaries. The level of educational infrastructure in the state is also very poor and badly deficient at present in terms of pupil–teacher ratio, school building and amenities, supply of text books and so on. This will require almost doubling of the current allocation.

Table 3.15
Units of Appropriation (%)

<i>Units of Appropriation</i>	<i>Elementary Education (Non-plan)</i>					
	1994–95	1995–96	1996–97	1997–98	1998–99	1999–2000
Salary	98.97	99.78	99.74	98.82	99.75	99.73
Travel	0.28	0.03	0.03	0.02	0.02	0.02
Office Expenses	0.69	0.19	0.21	0.21	0.21	0.23
Scholarship/stipend	0.03	0	0.01	0.01	0.01	0.01
Material & Supplies	0.04	0	0.01	0.01	0.01	0.01
Minor Construction	0.15	0	0	0	0	0
Others	0	0	0	0	0	0

Source: Government of Bihar, Appropriation Accounts (various years), Patna.

Problem of Less Appropriation

Regarding public expenditure on development activities/schemes/programmes in general, one of the most serious concerns that is often raised is the problem of less expenditure.¹⁴ On the one hand, there has always been a hue and cry over lack of resources and, on the other, the state is unable to spend whatever meagre but precious resources that it has at its disposal. In many instances, central grants have been returned largely unutilised. Sometimes the State has failed to even obtain the grant. Moreover, its internal resources could also never be fully spent. However, underspending hardly occurs in non-plan expenditure, but it does occur almost every year under plan expenditure (Mahendra Dev and Mooij, 2002). The problem is even worse if one looks at mid-year underutilisation rates.¹⁵ One glaring example is of low utilisation of funds in BEP. Its actual expenditure in the year 2000–01 has been a mere 30 per cent of the budget allocation in that year. This underutilisation data for the period 1997–01 is presented in Table 3.16.

While discussing the working of DPEP, CAG (2000) reports the following points:

- The programme faltered midway owing to poor release/ utilisation of funds, misutilisation of funds and inadequate and ineffective monitoring.
- During 1997–98, only 38 per cent of the budget provision was released by the centre and the state. Poor release of the central share was attributable to non-submission of the utilisation certificate by the state.
- Fraudulent encashment, fictitious purchase of vehicles, avoidable payment of excise duty, irregular payment of employees' share, loss of revenue, irregular incentives to *mahila samooch*, excess payment and allowance to staff, shortage of books and so on, as noticed in the test-check, aggregated Rs 13.7 million.

Table 3.16
Budget Provision and Actual Expenditure under DPEP (Rs million)

	<i>Budget</i>	<i>Actual</i>	<i>Percentage Utilisation</i>
1997–98	319.8	35.80	11.2
1998–99	1235.75	476.55	38.56
1999–2000	1,343.37	556.63	41.44
2000–01	1,366.61	444.85	32.55

Source: CAG Report, 2000.

Similarly, under many other programmes (particularly PMGY), allocated amounts could not be spent because of shortfalls by the state government. For example, the Department of Welfare receives allocations for the educational development of weaker sections. The programme includes various types of schemes such as establishment of book banks, pre-matric stipends, scholarships for children of parents involved in unclean occupations and the construction of hostels for students of the SCs and STs. However, in the year 2000–01, out of these various schemes, only one scheme (pre-matric stipend) functioned and funds allocated for the others were not released.

Various explanations have been offered for this situation. Here, we shall confine ourselves to a few governance-related aspects. The politics of Bihar has been undergoing changes during the last

two decades. A kind of de-elitisation of power politics and, consequently, wider participation has taken place. There have been efforts to accommodate as many social and political forces as possible in the political processes. The era of upper-caste monopoly has come to an end. Corruption, crime, contract politics and so on have become more broad-based and fiercely contested. The state has earned the worst kind of notoriety for undue political interference, big scams, all-pervasive corruption and related crimes. Never before were there as many court cases and investigations into cases of corruption as today. Politicians and bureaucrats spend a considerable amount of time in courts. Importantly, the power base of the bureaucracy has been greatly eroded by the political executive. A kind of cynicism has developed even among many well-meaning bureaucrats. A state of chaos and helplessness has set in. In this situation, action is seen as a risk and inaction as a privilege. Side by side, the culture of protest has also increased and erstwhile silent sections of the society have become vocal. But this has not proved sufficient to change the political discourse. It is unfortunate that the slogan of social justice has been posited quite successfully, while development has been relegated to the margin.

5. HOUSEHOLD COST OF ELEMENTARY EDUCATION

Although elementary education in India is supposed to be 'free' in government schools, there have been various studies which show that it involves cost for households for both private and government schooling. In most of the government schools, 'free education' largely implies only 'free tuition' as students are generally required to pay for other items. The cost incurred by parents on education often suppresses the demand for education particularly in the lower income group and poorer sections in society.

Elementary Education Is Not Free

Outside of a few sporadic studies,¹⁶ no systematic and scientific data base exists for the estimation of cost incurred by households on different items of elementary education. The NSSO, 1995-96

provided some information on the cost of sending a child to school, but detailed types of expenditure are not available. On the basis of the data available from the NSSO 42nd Round, the estimated cost of sending one child to school was Rs 212 (excluding cost on clothing) in 1986–87. Accordingly, the NCAER survey and PROBE estimates for elementary and primary levels respectively were Rs 478 and Rs 318. In general, the average cost is lower in rural areas and for government schools.

The Unicef survey in the academic year 1999–2000 provides information on household expenditure on 13 items¹⁷ relating to elementary education. Together, the average annual cost of schooling in Bihar at the primary level was Rs 758 in rural areas and Rs 1,254 in urban areas. The corresponding figures for upper primary level was Rs 1,342 and Rs 1,830 respectively. At the elementary level, the average annual cost was Rs 858 in rural and Rs 1,381 in urban areas. In all, the average cost of schooling in rural areas is approximately 60 to 75 per cent of that in urban areas at the different levels of schooling. Moreover, the cost is substantially higher in private schools which can be attributed to higher costs for tuition fees, donations, examination fees, annual festivals, books and stationery.

On the basis of the average annual cost of schooling, the average monthly expenditure has been worked out, which shows that even in the villages of Bihar, the monthly expenditure incurred by households for primary education is often more than Rs 60. In urban areas, it is more than Rs 100 (Table 3.17). On average, a household

Table 3.17
Average Monthly Household Expenditure on Elementary Education (Rs month)

<i>States</i>	<i>Primary</i>		<i>Upper primary</i>		<i>Elementary</i>	
	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>
AP	42.4	98.0	90.1	116.0	52.2	103.7
Assam	47.0	171.8	75.8	221.2	53.3	191.0
Bihar	63.2	104.5	111.8	152.5	71.5	115.1
MP	45.7	103.5	87.4	157.2	54.5	119.1
Rajasthan	79.0	146.8	130.0	218.3	91.1	167.0
TN	75.6	121.2	153.5	150.4	99.0	133.4
UP	71.7	127.6	130.6	167.1	83.9	136.2
WB	51.5	97.4	143.4	182.0	73.2	123.9

Source: Unicef Survey, 1999–2000.

spends 3.7 per cent of its monthly income on schooling in rural areas and 3.5 per cent in case of urban areas.

Cost of Education in Public and Private Schools

The household expenditure per student varies significantly across the management types of schools (Table 3.18). The cost is significantly higher in case of private managed schools (both aided and unaided) and within the government schools, the costs are higher for the upper primary than the primary level. In Bihar, the average cost of private schooling is 0.5 to 3 times higher in comparison to government school at primary levels and is 1.5 to 1.75 times higher at upper primary levels.

Table 3.18
Average Annual Cost (Rs) of Schooling in Government and Private Schools

<i>Type of School</i>	<i>Primary</i>	<i>Upper Primary</i>	<i>Elementary</i>
Government	681.3	1,405.5	825.7
Private Aided	1,593.8	2,540.0	1,819.1
Private Unaided	1,872.5	2,175.3	1,907.0
% High in Private Aided over Government	133.9	80.7	120.3
% High in Private Unaided over Government	174.9	54.8	131.0

Source: Unicef Survey, 1999–2000.

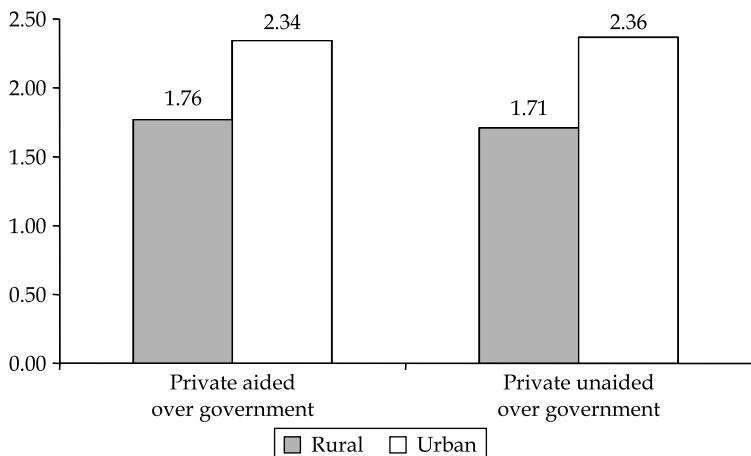
The cost difference between government and private schools is higher in urban areas as compared to rural areas. The cost of schooling at the elementary level in urban areas is approximately 2.5 times higher in private schools as compared to government schools, and is approximately 1.75 times higher in rural areas (Figure 3.9). It is evident from Figure 3.9 that apart from the higher schooling cost of private schools (both private aided/unaided and rural/urban), the ratio of private to government schooling cost is almost 50 per cent higher in urban areas.

Composition of Schooling Cost

As has been said earlier, the Unicef survey collected data on 13 items of expenditure related to the elementary education. Among these,

uniform, tuition fees, books, and stationery have the largest share in descending order (Figure 3.10).

Figure 3.9
Ratio of Cost of Schooling of Private to Government Schools
in Rural and Urban Areas



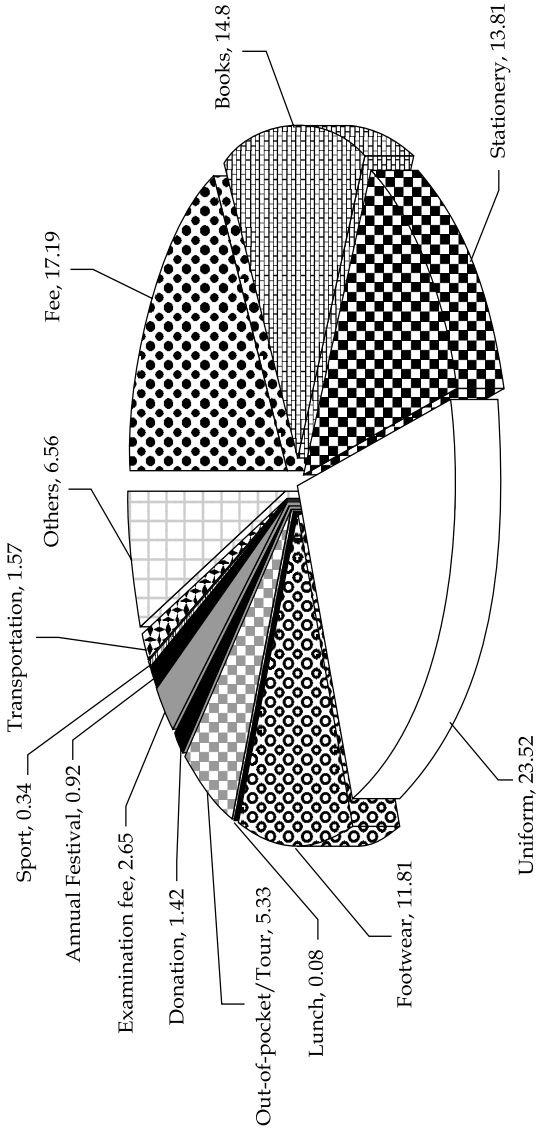
Source: Unicef Survey, 1999–2000.

It can be seen from Figure 3.10 that uniform, tuition fees, books, and stationery contribute 23.52, 17.19, 14.80 and 13.81 per cent respectively to the total expenditure on elementary education. Apart from these, footwear also shares a significant proportion of the total expenditure. Moreover, the patterns of expenditure on these items are different in rural and urban areas. In rural areas, school-related expenditure is a lesser proportion of total expenditure in comparison with that in urban areas, while the reverse is true for personal expenditures including uniform, footwear, transportation and so on.

Socio-economic Linkage of Household Expenditure

The household expenditure on elementary education shows wide variations between social groups as the highest expenditure is by the upper castes and the lowest by the SCs. The variations are slightly less pronounced in the case of girls' education in rural areas (Table 3.19).

Figure 3.10
Percentage Distribution of Total Cost of Elementary Expenditure
by Item of Expenditure



Source: *Unicef Survey, 1999–2000.*

Table 3.19
Average Annual Cost (Rs) of Education for Boys
and Girls across Social Groups

Social groups	Rural			Urban		
	Boys	Girls	Total	Boys	Girls	Total
SC	763.4	709.1	749.6	1,034.3	839.0	951.7
ST	1,243.6	1,149.2	1,204.5	768.0	1,117.4	942.7
OBC	929.2	707.0	847.0	1,539.8	1,159.4	1,360.2
Others	899.5	738.0	829.2	1,906.2	1,527.8	1,708.2

Source: Unicef Survey, 1999–2000.

The difference in cost of education across social groups between rural and urban areas is less for the SCs, while the difference is much more pronounced for others. The difference is not much higher across social groups for girl's education. This suggests that girl students across the social groups may be deprived of better schools, uniforms, and transportation facilities in comparison with boy students, particularly in rural areas. Castewise patterns of expenditure are more or less similar for rural and urban areas, with expenditure being highest for upper castes, followed by the OBCs and SCs/STs.

Expenditure on schooling by income levels showed a high expenditure by the lowest income group of below Rs 12,000, which is next only to the highest income level of above Rs 50,000. This is true for both rural and urban areas. The Unicef survey also showed that the cost of schooling steadily increased as the education level of parents increased in both urban and rural areas. Parents educated to graduate and higher levels in rural areas spent more than double the amount on boy's education than on girl's education, while in urban areas only illiterate parents spent more on boy's than on girl's education.

Patterns of expenditure on education across occupation categories showed the lowest expenditure by skilled workers, self-employed, agricultural labourers and farmers, and the highest expenditure by the business class followed by professionals. This is true in both rural and urban areas. In fact, it is easier for professional and regular workers to meet various kinds of cash requirements for schooling. For farmers and casual wage earners, it is not only the amount of expenditure which is burdensome, but also it

becomes difficult for them to arrange cash at different points of time, particularly during the lean periods.

Opportunity Cost of Education

Apart from the direct costs involved in the education of children, there is also an opportunity cost particularly for rural areas. The opportunity costs can be calculated by assessing the foregone income of children attending schools. Different studies have shown that in India, the percentage of children working is between 10 and 12. In Bihar, the figure is slightly lower at around 5 to 6 per cent. These children are involved in the labour market as independent workers or as helpers for their parents. All children attending elementary education are not supposed to incur opportunity costs, as all of them may not be involved in the labour market. However, a large proportion of children (particularly in the 10–14 age group) from the lower castes are involved in wage earning directly or are helping with the farm activities of their parents. In such a situation, attending school will directly mean loss of earnings for their households and the chances of opportunity costs are higher. On the basis of child participation rates and average daily wage rates for children as reported by the NSSO (55th Round for the year 1999–2000), the opportunity cost of elementary education in Bihar has been worked out separately for rural and urban areas. The child participation rates, average daily wage rates and resultant wage loss because of non-participation in the labour market is presented in Table 3.20.

Table 3.20
Average Annual Opportunity Cost of Elementary Education

	<i>Number of Children*</i>	<i>Working Days**</i>	<i>Daily Wage Rate** (Rs)</i>	<i>WPR**</i>	<i>Opportunity Cost (Rs)</i>
Rural					
Primary level	461	201	32	0.8	2,372
Upper primary level	123	201	32	9.4	7,437
All	584	201	32	2.4	8,978
Urban					
Primary level	410	207	35	0.5	1,485
Upper primary level	159	207	35	6.4	7,373
All	569	207	35	1.9	7,791

Sources: * *Unicef Survey, 1999–2000*; ** *NSSO, 1999*.

From Table 3.20, it is clear that the average annual opportunity cost of elementary education in Bihar is higher in rural areas as compared to urban areas. Further, at the upper primary level, the opportunity cost is much higher than that at primary level. Across different socio-economic groups, the opportunity cost will be higher for lower classes and castes, simply because child labour is substantially higher among them in comparison to others.

6. POTENTIAL FOR NEW REFORMS

The foregoing discussion suggests that given the state of affairs in the state, or more specifically with the present level of development in the elementary education sector, Universal Elementary Education (UEE) in Bihar is a distant dream. As a strategic move, the central government has now started advocating Universal Primary Education (UPE) in the age group of 6 to 10 years instead of UEE. Given the high rates of non-enrolled children at the initial level of primary education itself, this may be a good move. However, in Bihar, UEE continues to be the thrust of the Tenth Five Year Plan (2002–07). The Draft Tenth Five Year Plan Document of Government of Bihar notes that 'all the schemes during the Tenth Plan period envisages 100 per cent universalisation of Elementary Education and total literacy' (GOB, 2002). However, realising the goal of UEE in the state requires multi-pronged efforts with a clear stress on UPE in the first instance. This is because unless the enrolment rate of 95 per cent is ensured at the primary level, and primary education for most of the enrolled is completed, the objective of UEE will not be achieved.

The responsibility for the development of elementary education in the state largely rests with the Department of Education. Whatever contribution other departments have made, they are ad hoc and casual in nature. There is a need to sensitise all government departments towards the cause of education and achieving the goal of UEE. For this, all the important departments may be instructed to earmark funds for this cause with high focus on enrolment of children of socially marginalised groups.

One of the important supply-side factors which inhibits the growth of elementary education is the slow growth in the number of institutions at primary as well as secondary levels. At the primary

level, the growth rate of the number of institutions has been much lower than the national average. At the upper primary level, although the growth rate has been somewhat higher in comparison to that of the primary level, the ratio of upper primary to primary schools continues to be very low. The low upper primary to primary school ratio has badly affected the educational achievements of girls at the upper primary level.

Although as per government records approximately 95 per cent of villages have primary schools within a radius of 1 km, a large number of these schools remain either closed for most of the year or lack many of the basic facilities (including teachers). Besides, a number of villages are cut off during rainy season on account of poor road conditions and transportation facilities. This is demotivating for children from these villages. Hence, there is an urgent need to increase the number of schools, particularly upper primary schools, within the periphery of a village and there is need to strengthen the schooling system by providing better facilities at the school level. The Education Guarantee Scheme (EGS), which has proved successful in states such as MP and Rajasthan, may be replicated in the state to make schooling available at the lowest level.

Adequate numbers of teachers is also one of the most important supply side determinants as the pupil-teacher ratio is very high in the state. The ratio is as high as 62 in rural areas and 49 in urban areas, compared to 42 and 39 respectively for the nation. Obviously, the proportion of single-teacher schools is very high. In many cases, it has been found that the school remains closed for a significantly longer period as teachers take leave (authorised and unauthorised) from the school. The appointment of at least two teachers per school is urgently required for the proper functioning of schools in remote areas. In terms of educational parameters, the developed states such as Kerala and Himachal Pradesh hardly have any single-teacher schools. The high achieving states also have a high share of female teachers. The ratio of female to male teachers in Bihar is somewhat respectable. However, the ratio of teachers belonging to the lower classes and the SCs and STs is very low, and this has inhibited the growth of enrolment and attendance among SC and ST children. The Dalitisation of public schools should not be enrolment-centred but also Dalit teachers should be appointed with proper training. However, care should

be taken that largely Dalit-populated schools do not only get Dalit teachers; confining Dalit teachers to teach the Dalit children would lead to a degree of ghettoisation.

There have been successes with para-teachers. The state has an ad hoc policy on para-teachers, which should be strengthened and popularised in the state.

Enrolment and attendance have been issues in achieving universalisation of elementary education. Bihar has shown almost the lowest enrolment and attendance ratios among all major states. As a result, the proportion of 'never-enrolled children' is high. Parents have shown interest in the education of their children, but are disillusioned with the quality of education in government schools and are discouraged from sending children to school. In order to improve attendance ratios, the appointment of an adequate number of qualified and trained teachers, provision of a sufficient number of classrooms, toilet and drinking water facilities, playgrounds and good school buildings are necessary. Until serious efforts are made in this direction, the problems of low enrolment and the high dropout ratio can not be tackled.

The provision of these basic facilities at the school levels involves cost. The Government of Bihar has not been in a position to recruit an adequate number of teachers because of the resource crunch. However, there are certain things which can be regulated without having much financial implication, and are good governing techniques, with some public participation. Some of these areas of action are as follows:

- regularise and ensure teacher attendance;
- improve classroom curriculum with an effective monitoring system;
- teachers asked to stay within the village at least during working days;
- make school environment congenial for lower class and caste children;
- *anganwadi* centre to be made operational in a more effective manner;
- teachers to develop rapport with parents within the village so that enrolment and attendance may improve;
- EGS to be made more popular and effective.

A better way of tackling these problems may be by involving lower level institutions, particularly the *panchayati raj* institution, in decision-making. However, the success of this kind of decentralisation rests essentially on the efficiency of these institutions. In many instances Village-Level Committees created after Operation Blackboard in many states rarely function. Yet in certain states the active involvement of the community in the affairs of the local school has been an important force to change.

However, besides these, there are a number of potential areas which require enhanced public spending. These include, the opening of new schools, appointment of teachers, improving basic facilities at school levels, and supply of teaching-learning materials. So far the state government has been spending approximately one-fourth of its total revenue expenditure on education, with more than 65 per cent going towards elementary education. However, over the years, the growth rate of expenditure on education further decreased after 1991–92. As a result, the per capita expenditure on education is one of the lowest among the major states. Moreover, in comparison with others, the proportion of non-plan expenditure has been substantially higher, reflecting very little scope for spending on plan schemes. Nearly 99 per cent of the revenue expenditure in the elementary education sector is spent on 'salary' and 'travels'. Although within plan expenditure, most of the schemes are centrally sponsored, the state has no money to meet even the matching amount. This has resulted in low utilisation of central assistance particularly within the elementary education sector.

Private sector participation in education has been substantial in the state. Although the intensity of private aided schools is very low, there is a very high proportion of private unaided schools. Accordingly, the proportion of unrecognised schools in the state is also high. These schools have some advantage in terms of basic facilities and classroom curricula. There is a need to regulate these institutions on a national level. One such regulation may be in terms of required placement reservations for the weaker sections of society at the student and teacher levels. Regional openings of such private schools may also be regulated in order to bridge the gap of regional disparity in the availability of institutions. A good interface between government and private schools may produce good results in terms of the quality of education in government schools.

APPENDIX 3A-1

Table 3A.1
Gross Enrolment Ratio in Major States, 1999–2000

State	Classes 1–6 (6–11 Years)			Classes 6–8 (11–14 Years)		
	Boys (%)	Girls (%)	Total (%)	Boys (%)	Girls (%)	Total (%)
AP	105.21	101.39	103.32	52.30	42.77	47.65
Assam	124.25	105.35	114.94	81.02	64.33	72.99
Bihar	94.51	61.46	78.56	41.38	22.04	32.36
Gujarat	124.54	101.43	113.38	71.81	57.31	64.89
Haryana	81.22	82.98	82.04	64.58	59.02	62.00
HP	92.97	80.83	86.66	91.80	78.66	85.15
J&K	92.55	64.78	78.47	79.54	49.18	64.60
Karnataka	112.83	105.87	109.39	70.71	60.49	65.67
Kerala	85.80	84.74	85.28	97.78	93.36	95.61
MP	126.53	102.94	115.03	75.28	48.70	92.56
Maharashtra	115.80	112.32	114.10	96.72	80.37	88.80
Orissa	125.70	91.48	108.84	66.59	43.75	55.34
Punjab	79.91	81.71	80.75	64.53	64.95	64.73
Rajasthan	137.61	83.81	111.92	105.89	48.35	78.88
TN	102.75	98.62	100.73	88.56	85.15	86.89
UP	78.43	50.18	64.97	48.69	25.80	38.09
WB	105.35	94.86	100.19	57.00	43.91	50.63
India	104.08	85.18	94.90	67.15	49.66	58.79

Source: Selected Educational Statistics, 1999–2000.

Notes

1. Though the state of Bihar was bifurcated into Jharkhand and truncated Bihar in November 2000, throughout this chapter reference is made to the erstwhile Bihar.
2. In the constitutional scheme certain subjects are exclusively in the domain of the central government to legislate and some others fall in the domain of state governments. These are known as Central and State Lists respectively. However, there are a few subjects on which both the levels of governments can legislate. This is known as the Concurrent List. In case of clash of the scheme of legislation the central legislation will prevail.
3. Bihar Education Project (BEP) is a registered organisation controlled by the government of Bihar. The organisation is headed by a senior IAS officer sent on deputation by the government. BEP is implementing District Primary Education Project (DPEP) III in 17 districts of Bihar. DPEP III ended on 31 March 2003. BEP is also involved in implementation of SSA in its districts.

4. SPEED is also a registered organisation controlled by the government which was set up with the aim to speed up the progress of elementary education in seven districts of Bihar. All such programmes are intended to be subsumed by the SSA.
5. Since most of the enrolment figures are based on statistics supplied by schools, they suffer from the problem of overestimation because of two reasons. First, of the children shown as being enrolled from Classes 1–5, a substantial proportion do not attend as many schools, particularly in rural areas, and the enrolment register is maintained just for the sake of showing high enrolment figures. Secondly, these enrolment figures are not age adjusted for the children of school-going age.
6. The difference between GER and NER indicates the participation of over- and under-aged children in the specific stages of elementary education.
7. This survey was conducted in 8 major states namely AP, Assam, Bihar, MP, Rajasthan, TN, UP and WB by New Concept Consultancy Services, New Delhi, India.
8. There are a few negative figures in this table which may be explained by two factors: (a) limitation of the data base itself in terms of small size of sample, and (b) net increase in the enrolment because of new enrolment at that stage of education. However, since the negative figures arise only in the rural areas, they can be explained in terms of sudden increase in enrolment in Class 5. Class 5 being a terminal year of the primary education, in rural Bihar a net increase in the enrolment may be expected as a result of special efforts of enrolment made by school administrations in order to show better records of enrolment at this level of education. This is also evident from the very steep dropout rates between Class 5 and Class 6.
9. During the 1990s, the population growth rate in Bihar has been the highest among all the states, the CAGR of population being 2.8 per cent as against 1.8 per cent during 1980s. At the same time the CAGR of educational institutions at elementary levels has been 0.25 per cent (refer to Figure 3.3).
10. Further, all expenditure is also divided into 'plan' (reflecting investment/expenditure on new schemes) and 'non-plan' expenditure (reflecting maintenance and current expenditure on old schemes and recurrent expenditure). In general, the expenditure on schemes which are 'plan' in the first round are subsequently transferred to the 'non-plan' side (although there are some schemes which continue to be 'plan').
11. External assistance to state programmes is provided to state governments as 'Additional Central Assistance' on the same terms as 'Central Assistance', whereas external assistance through central schemes is provided to the state on terms and conditions (of counterpart funding and so on) which are specified for each scheme.
12. For detailed statewise analysis see Mahendra Dev and Mooij, 2002.
13. The use of alternative deflators such as the State Domestic Product (SDP) deflator or the Public Administration deflator also shows low growth rate (even lower than the 2 per cent annual increase).
14. The problem is not confined to the education department alone, but has become the hallmark of the entire state machinery.

15. Rajaraman (2001a; 2001b), while analysing major rural development schemes, finds that the utilisation rates of these funds were less than 50 per cent of the funds allocated for the first six months. This led to 'hasty and wasteful expenditure in the second half of the fiscal year' (Rajaraman, 2001a; 2001b). This applies to education as well.
16. See for example Panchamukhi (1989) and Tilak (2001) for estimation of cost of elementary education in India.
17. The 13 items selected in the Unicef survey are fees, books, stationery, uniform, footwear, lunch, out-of-pocket tour, donation, examination fee, annual festival, sport, transportation and others.

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4

The Cost and Financing of Universalising Elementary Education: A Silver Lining in Rajasthan?

SUNIL RAY

1. INTRODUCTION

The state of Rajasthan achieved a breakthrough in the field of education in the recent past as the literacy rate of the state rose 22.43 percentage points in a period of 10 years between 1991 and 2001. The literacy rate went from 38.60 per cent in 1991 to 61.03 per cent in 2001 (Government of Rajasthan, 2002). With this estimate, there are still around 40 per cent of the over-15 year olds who remain illiterate. Besides, the state has had a history of educational backwardness: when India's literacy rate in 1981 was 43.6 per cent, in Rajasthan it was 30.7 per cent. In fact, Rajasthan's female literacy rate was half that of all India: 14.5 as against 29.8 per cent. There was not much progress until 1991; when India's literacy rate was 52.2, in Rajasthan it was 38.6 per cent; and Rajasthan's female literacy rate was barely 20.4 per cent, when the Indian average was nearly double at 39.3 per cent.

There are several factors that underlie such underdevelopment. First, the state has one of the highest proportions of Scheduled Castes (SCs) and Scheduled Tribes (STs) in the country; and, as is known, the upper caste domination of society has ensured the educational backwardness of SCs in all states. While the national average for SCs' share in the population is 15 per cent, in Rajasthan SCs constitute 18 per cent of the population; similarly, the STs constitute only 8.5 per cent of the national population, but 15 per cent

of the Rajasthan population. In addition, 5 per cent of the population is Muslim. Secondly, the state's historic feudal social structure and, with it, the relatively rigid traditional gender norms among the upper castes, has meant that girls' education was particularly held back.

Immediately after independence, efforts were focused on setting up elementary schools in various parts of the state, because schools were lacking in many areas. However, one may question the adequacy, quality and accessibility of the schools (Acharya, 1994; Nambissan, 2001). This chapter addresses these issues against the backdrop of household dynamics of demand for elementary education and the responses of the state to such demand.

Section 2, which follows, examines the progress in elementary education. It examines briefly the reasons why Rajasthan made such remarkable progress—like MP—in reducing illiteracy over 1991–2001, but then focuses on the unfinished agenda. It draws upon the Unicef survey (1999) for this purpose, including Focus Group Discussions (FGDs), which highlight the parents' sense of despair about the quality of government schools. Section 3 examines the private school system, which is growing in response to the problems of the government school system. Section 4 discusses the public expenditure pattern in the state as a contributory cause of the state of affairs in government schools. Section 5 dwells on the out-of-pocket costs of schooling, which remain a factor in parental demand for schooling. The final section examines some government initiatives, and points to possible actions required.

2. PROGRESS IN ELEMENTARY EDUCATION

The increase in number of elementary schools after the 1960s narrowed the gap in number between primary and upper primary schools, as shown in Table 4.1.

Table 4.1 shows close to a 10:1 ratio between primary and upper primary schools in early 1960s, which declined in subsequent years as the number of upper primary schools rose. The trend of growth of both primary and upper primary schools over the years is encouraging for children who completed primary and intended to enter the elementary section.

Table 4.1
Primary and Upper Primary Schools

<i>Year</i>	<i>No. of Primary School</i>	<i>No. of Upper Primary School</i>	<i>No. of Primary per Upper Primary School</i>
1950-51	4,336	732	5.92
1960-61	14,548	1,416	10.27
1970-71	19,330	2,042	9.47
1980-81	22,510	5,200	4.33
1990-91	29,817	9,230	3.23
1997-98	33,839	14,634	2.31

Source: Government of Rajasthan (1997-98).

Despite such an increase in the number of educational institutions, there is still a large disparity between districts. Those located primarily in the desert and the tribal areas have a much higher ratio than the state average. Limited opportunities exist for upper primary schooling and a complete elementary education. These districts are economically backward too. This trait, directly or indirectly, imposes a 'natural' constraint on Universal Elementary Education (UEE) and facilitates perpetual educational backwardness. The natural limit, which is a result of slow growth in the number of schools, can be gauged from comparative growth of schools and enrolment.

The physical distance of students from schools is another source of demotivation, especially in Rajasthan where population density is quite low. According to the Sixth All-India Survey, the total number of rural habitations during 1993-94 was 63,970. Of these, 16,259 (25.4 per cent) did not have primary school within one km. and, if we consider availability of a Non-formal Educational (NFE) centre, only 619 of 16,259 habitations have this available. Therefore, 15,640 (24.45 per cent) habitations covering an estimated population of 2,504,559 had neither a primary school nor an NFE centre. The districts (primarily Barmer, Ganganagar, Udaipur and Jaipur) have the highest number of such habitations.

In terms of villages, out of the 37,889 villages in Rajasthan, 8,732 (23.05 per cent) do not have primary schools. Of these, 802 villages have an NFE centre. Thus, 7,930 (20.93 per cent) villages have neither primary schools nor NFE centres, and are therefore deprived of any type of facility for basic education. Most of such villages are found in the Ganganagar, Chitorgarh and Udaipur districts.

In fact, in remote villages of Rajasthan, especially in desert regions, the general problem of teacher absenteeism was always very serious, especially among those not belonging to the area. To address this problem, the Rajasthan government started in 1987–88 the *shiksha karmi* project after realising that universalising primary education will not be possible in 10–15 per cent of the villages of Rajasthan due to teacher absenteeism alone. The project has been successful in revitalising primary education by actively involving the community through Village Education Committees (VECs) and employing local people with modest educational qualifications and no professional training at the time of recruitment as para-teachers, also known as *shiksha karmis*. Two para-teachers (one male and one female), identified by the community, are in charge of the primary school of the village after having received training for 41–50 days, as well as training on a regular basis. The training provided by NGOs and District Institutes of Educational Training is to ensure that they can teach up to Class 5; the minimum qualification for men is Class 8 and for women Class 5. In addition, for every 15 to 17 schools there is a *shiksha karmi sahayogi*, who provides on the spot support to the para-teachers in resolving problems of an academic and non-academic nature. Every para-teacher is required to run evening schools (*prehar pathshalas*) in addition to the day schools to cater to children who are unable to attend schools during normal hours. The project operates in 146 panchayat samitis, running 2,600 day schools, 4,829 *prehar pathshalas*, and 97 *angan pathshalas*. In these schools there were (in 2001) 6,213 teachers and 216,084 students.

However, in view of the physical difficulties in access to primary education, in the mid-1990s the Government of Rajasthan began a new scheme (*Rajiv Gandhi Swarna Jayanti Pathshalas*), modelled on the Education Guarantee Scheme in Madhya Pradesh, as part of the overall efforts made towards UEE. The idea is to create schools in areas/habitations where there were still no schools, on demand from the *gram sabha* or ward sabha. The criteria for selection of habitations were: a population of at least 200 people; 40 or more children in the age group 6–11; no school within the radius of 1 km. As with the *shiksha karmi* project, the village committee is responsible for the selection of teachers, who should preferably belong to the community. The minimum academic qualification required

is senior/higher secondary pass, but could be relaxed to Class 8 pass in difficult areas. For their training the shiksha karmi training module and infrastructure are used. During 1999–2000, as many as 12,355 such schools were sanctioned, and around 11,847 schools are presently functioning at the beginning of this decade. These schemes are clearly behind the remarkable surge in literacy that Rajasthan experienced during the 1990s. Nevertheless, the state was starting from such a low base, that major challenges still remain.

The performance of the state in providing upper primary school within the distance of 3 km from habitation is still far from satisfactory. Out of the total number of habitations mentioned above, 36 per cent are beyond the 3 km limit. Although there has been an expansion of educational facilities through the upper primary stage over the years, uneven distribution of these facilities between the districts is noticeable. The districts with the highest percentage of population served by an upper primary school are Sikar, Pali, Jhunjhunu and Churu, in contrast to the desert districts of Barmer and Jaisalmer.

In summary, while the physical growth of educational institutions had been good, it originated from an extremely low base. As many as 16,259 habitations have yet to be provided with primary schools within 1 km and 22,751 habitations lack an upper primary school within 3 km. Most importantly, 7,930 villages deprived of access to any form of basic education deserve to be accorded priority status. Disproportionate distribution of educational infrastructure across the state continues to reinforce intra-regional disparity.

Enrolment: The Equity Issue

Along with the growth of educational institutions in the post-independence period, enrolment of children in elementary education progressed from 330,000 to 4,099,000 in the primary section and from 61,000 to 3,550,000 in the upper primary section from 1950–51 to 1997–98 (Table 4.2). But gender differentials still endure.

Table 4.2 shows that of all children enrolled, only 40 per cent are girls at primary level and 29 per cent at upper primary level (in 1997–98). Although there has been a definite improvement in

girls' enrolment over the years, institutional growth does not seem to have addressed gender discrimination at upper primary level.

Table 4.2
Growth of Enrolment: Male versus Female (1950–51 to 1997–98)

Year	Primary			Upper Primary		
	Boys	Girls	Total	Boys	Girls	Total
1950–51	275	55 (16.7)	330	52	9 (14.8)	61
1960–61	899	215 (19.3)	1,114	179	28 (13.5)	207
1970–71	1,600	605 (27.4)	2,205	419	99 (19.1)	518
1980–81	2,185	722 (24.8)	2,907	520	146 (21.9)	666
1990–91	3,195	1,446 (31.2)	4,641	1,055	318 (23.2)	1,373
1997–98	4,164	2,731 (39.6)	6,895	1,396	582 (29.4)	1,978

Source: Government of Rajasthan, (1997–98).

Note: Figures in brackets are percentages to total number of children enrolled.

If one examines the response of deprived social groups (such as SCs and STs), the scenario is depressing. Enrolment of children from SC and ST communities has not improved between the Fifth and Sixth Educational Surveys (1986 and 1993). The percentage of SC children enrolled during the Fifth and Sixth Surveys were 16.74 and 16.55 respectively, with 10.52 and 10.95 per cent of ST children correspondingly enrolled. This situation existed at least until the middle of 1990s, despite the introduction of various enrolment incentives.

Unequal status of enrolment in terms of gender and social groups has a regional dimension also. If the enrolment status of girls is examined in rural and urban areas separately, access (especially to upper primary education) is much worse in rural areas compared to access in urban areas. According to the Sixth Educational Survey, only 18 per cent of girl children of all communities within rural areas were enrolled in the upper primary level, compared to 39 per cent in urban areas.

The enrolment status of girl children of SC and ST communities in this respect was much worse. Only 11–12 per cent of SC and ST

girls were enrolled in the upper primary section in the rural areas, with 28 to 30 per cent enrolled in the urban areas comparatively. Enrolment status of girls from these communities in the primary section was better than that of the upper primary section, but gender inequality still exists.

An analysis of enrolment status at the disaggregated level shows other dimensions of inequality that seem to be reducing the prospect of UEE.¹ Table 4.3, based on the Unicef survey, shows enrolment of children of different age groups across gender, caste groups and regions.

Within the rural areas, it appears that there has been some improvement in girls' enrolment especially within the SC community although they are far behind the 'others' category. Girl children of the ST community are worse off. Only 37 per cent of the total eligible children in ST community in the age group 6–10 (primary section) and 30 per cent in the age group 11–13 (upper primary) were enrolled. Nearly 63 per cent and 70 per cent girls in these two age groups are never enrolled. Another important observation is that just half of the eligible girl children in age group 11–13 of all caste groups together are enrolled in the rural areas, contrasting with 83 per cent in the urban areas. One-half of the eligible girls in the rural areas are deprived of completing elementary education as their age increases. In the urban areas, girls' enrolment does not decline as markedly.

Table 4.3 shows that for the 14–18 year olds, the incidence of non-enrolment of boys is near 47 per cent in the rural areas and 35 per cent in urban areas. But for girls, 75 per cent in rural areas and 45 per cent in urban areas are not enrolled. Non-enrolment is concentrated in the ST and SC social groups. Interestingly, educational performance in terms of enrolment for the OBC group is much better than SC and ST in all age groups both in rural and urban areas. In fact, enrolment of this social group in urban areas is higher than that of the children of even upper caste group ('others category').

Those not enrolled either never enrolled or dropped out. The Unicef survey showed that the phenomenon of never being enrolled is relatively more serious than the incidence of 'dropout' in rural area across all age groups.

Table 4.3
Enrolment of Children by Age Group, Social Group and Region

	<i>Rural</i>						<i>Urban</i>					
	6-10		11-13		14-18		6-10		11-13		14-18	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
SC	77.5	57.6	77.8	42.7	44.9	17.2	89.1	80.9	84.3	74.0	59.5	44.6
ST	74.7	36.8	67.6	30.1	43.1	8.8	-	-	-	-	-	-
OBC	88.8	61.6	77.5	43.4	43.3	21.0	97.5	94.6	94.9	93.0	70.4	64.8
Others	92.7	75.9	88.7	59.6	60.9	30.9	21.3	89.5	91.3	82.9	64.8	56.1
Total	88.0	66.7	82.7	51.4	53.1	25.5	91.9	88.8	91.0	83.3	64.9	55.9
Eligible children												
(Total)	4,073	3,710	1,920	1,478	3,009	1,811	2,322	1,898	1,204	1,024	1,818	1,376

Source: Unicef Survey, 1999-2000.

Note: Enrolment is in terms of percentage to the total eligible children under different age groups. No sample household of ST children was available in urban areas. The number of eligible children of all age groups is 15,801 rural; 9,642 urban; 25,443 total.

The incidence of dropout increases as age of the children increases. The only exceptions are girls, of which many more are never enrolled across all age groups in rural areas. However, the incidence of dropout is relatively more serious than never being enrolled in the urban areas for both boys and girls. Caste analysis shows that it is highest amongst SC children in the urban areas in the age group 14–18 years, while in rural areas, dropouts are more frequent in OBC and 'other' categories for both boys and girls. The percentage of children not enrolled is highest in the ST category. Therefore, while incidence of non-enrolment is relatively more serious in the rural areas, incidence of dropping out is highest in the urban areas.

GER and NER

The Gross Enrolment Ratio (GER) and, more importantly, the Net Enrolment Ratio (NER) give perhaps better accounts of the actual progress made in elementary education than enrolment numbers. A comparison of Tables 4.4 (Unicef survey in 1999) and 4.5 (NSSO data for 1995–96) shows that Rajasthan made remarkable progress in the late 1990s, by increasing its total NER in rural areas from 51 per cent for 6–10 year olds in 1995 to nearly 78 per cent at the end of the decade, and in urban areas from 76 per cent to nearly 86 per cent. Similarly, for 11–13 year olds (that is children in the upper primary age group), the NER rose from 30 in rural areas to nearly 40 per cent, and in urban areas from 54 per cent to nearly 58 per cent.

However, the Unicef survey shows that the gender gap in enrolment remains quite appalling in rural areas, although the gap is quite small in urban areas. In fact, the survey also shows that the gender gap in enrolment is the worst for any of the states examined in this book—much worse, in fact, than in UP or Bihar; the same applies to representation of SCs and STs in Rajasthan (see Chapter 2).

Table 4.5 shows that enrolment was much lower in the rural areas than the average for India as a whole. The average NER of the state in rural areas in the age group 6–10 years is 51 per cent compared to 63 per cent nationally, and 30 per cent in the age group 11–13 years compared to 39 per cent. The corresponding urban numbers are closer together.

Table 4.4
GER and NER in Rajasthan

	GER %			NER %			GER-NER %		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
6–10									
Rural	116.1	88.1	103.5	86.0	68.1	77.9	78.7	60.0	70.3
Urban	114.6	108.2	111.7	87.0	84.3	85.7	79.6	71.3	75.9
11–13									
Rural	82.9	42.0	65.1	48.8	28.1	39.8	63.0	32.4	49.7
Urban	96.6	79.6	88.8	59.4	55.8	57.7	74.0	59.5	67.3

Source: *Unicef Survey, 1999–2000.*

Note: Since gross enrolment of children of all ages may exceed the population of children in the relevant school age for a given level, GER can exceed 100.

Table 4.5
GER and NER: Rajasthan versus India

	GER %		NER %		GER-NER %	
	Rural	Urban	Rural	Urban	Rural	Urban
6–10						
All India	81.0	100.0	63.0	78.0	18.0	22.0
Rajasthan	68.0	100.0	51.0	76.0	17.0	24.0
(11–13)						
All India	59.0	83.0	39.0	58.0	20.0	25.0
Rajasthan	50.0	79.0	30.0	54.0	20.0	25.0

Source: NSSO, (1995–96).

Factors Responsible for Non-enrolment and Dropping Out

The Unicef survey shows that the share of the never-enrolled was nearly 18 per cent among 6–10 year olds, and 19 per cent for 11–13 year olds—again with girls the worst affected. The Unicef survey reveals that domestic work (including looking after siblings) is most responsible for dropping out and non-enrolment in the rural area. Girl children are generally assigned more domestic work in both rural and urban areas. Engagement in domestic activities is categorised as (a) non-economic activity, including looking after siblings; and (b) economic activities are associated with income generation at the household level (agriculture and others). Together, such activities are responsible for nearly 30 per cent of non-enrolment and dropping out in the rural areas, and around 25 per cent in the urban areas.

Another factor harming attendance is that of parents who do not consider education as being useful. This is more pronounced

in the rural areas, and explains around 7–8 per cent of both non-enrolment and dropping out. Working for wages is actually less of a factor than what is normally believed, although 12 per cent of total responses show that it is more significant for urban male children.

3. ROLE OF PRIVATE SECTOR IN ELEMENTARY EDUCATION

Table 4.6 shows that enrolment in the private unaided schools in the rural areas increased between the two survey periods, 1986 and 1993. It increased from 1.1 per cent to 4.9 per cent at primary level, and from 1 to 2.2 per cent at upper primary level. However, it is in the urban areas that the growth seemed explosive. Total numbers of children in private unaided schools more than doubled in a matter of 6–7 years. Table 4.6 shows that the increase in enrolment in both primary and upper primary schools was much higher in the urban private unaided schools than in the schools under any other management. At primary level, their share of enrolments went up from 32.5 per cent to 46.4 per cent; and at upper primary level from 19.4 to 32 per cent during the same short time span.² It is difficult to say whether this growth was primarily due to the poor performance of government schools, or merely their poor coverage of the population.

The Unicef survey conducted in 1999 seems to suggest that the trend towards an increase in the size of the private sector has continued in absolute terms, though perhaps in relative terms only in rural areas. Although the survey does not distinguish the data by primary and upper primary level, it shows that in rural areas, the private sector (unaided) accounted for nearly 8 per cent of total enrolment (close to 9 per cent of enrolled boys and nearly 6 per cent of enrolled girls were in such schools). In urban areas, the share of enrolled children in private unaided schools was much higher, with 32.4 per cent of urban children at elementary level in private unaided schools.

The Unicef survey also reveals interesting points of comparison and contrast between government and private unaided schools. In rural areas, none of the private unaided schools are in *kutchha* buildings; 6.7 per cent of government schools are in such buildings. In urban areas, while 91 per cent of private unaided schools are in *pucca* buildings, 78 per cent of government schools are *pucca*. In urban areas, 76 per cent of private unaided schools have piped

Table 4.6
Enrolment in Schools under Differing Management (Rural and Urban)
(in thousand)

	Rural						Urban					
	Primary		Upper Primary		Total		Primary		Upper Primary		Total	
	5th Survey	6th Survey	5th Survey	6th Survey	5th Survey	6th Survey	5th Survey	6th Survey	5th Survey	6th Survey	5th Survey	6th Survey
Government	1,064 (33.66)	1,082 (28.97)	731 (95.93)	960 (96.58)	539 (50.56)	521 (39.32)	246 (62.76)	272 (50.18)	2,580	2,835		
Local Bodies	2,049 (64.82)	2,448 (65.54)	-	5 (0.50)	5 (0.47)	21 (1.58)	0.1 (0.03)	4 (0.74)	2,054	2,078		
Pvt	12 (0.38)	23 (0.62)	23 (3.02)	7 (0.70)	176 (16.51)	168 (12.68)	70 (17.86)	92 (16.97)	281	290		
Pvt Unaided	36 (1.14)	182 (4.87)	8 (1.05)	22 (2.21)	346 (32.46)	615 (46.42)	76 (19.39)	174 (32.10)	466	993		
Total	3,161 (100.0)	3,735 (100.0)	762 (100.0)	994 (100.0)	1,066 (100.0)	1,325 (100.0)	392 (100.0)	542 (100.0)	5,381	6,196		

Source: NCERT (1993).

Note: Bracketed figures are percentages of totals; 5th Survey in 1986; 6th Survey in 1993.

drinking water; only 59.5 per cent of government schools do. About 58 per cent of private unaided schools have toilets for girls, while 39 per cent of government schools do. Nearly 5 per cent of government schools are single-teacher schools; none of the private unaided ones are. The student-teacher ratio in government schools is 56 in rural and 45 in urban areas; in private unaided ones it is 35 and 27 respectively.

Remarkably, 52 per cent of teachers in private unaided schools are untrained, but only 5 per cent of government schoolteachers are untrained. Despite this fact, attendance at the private unaided schools as per head count (on the day of visit by survey enumerators) was 87 per cent in private unaided schools, but only 64.5 per cent in government schools. Clearly, the government schools face increasing competition, possibly because in the eyes of parents, the infrastructure that private unaided schools offer is better than that of government schools. At the same time, even though teachers in government schools might be better trained, the parents are disillusioned (as we will see from their statements during the focus group discussions), due to teacher absenteeism.

External Motivation

Motivation originating from sources external to the households is either equal or more powerful in inducing a greater participation of children in elementary education. The quality of education and availability of facilities are some important external sources that motivate parents to send their children to schools.

One of the noticeable and positive infrastructural features of the state is that around 90 per cent of school buildings are pucca. In this respect, the state seems to be much ahead of the national average. However, the minimum infrastructure for drinking water, toilet facilities and electricity is lacking, especially in rural areas. In many places, the Unicef survey revealed that children go home in order to drink water during school hours. These problems affect very few urban schools, although they do have notably fewer playgrounds than rural schools. Of note, a distance of beyond 2 km from habitation to school does not create any significant hurdle for children attending upper primary school (although it does affect primary school children). It also poses considerable difficulty in that the road in use is found to be pucca in only 10 per cent of cases.

Despite these difficulties, parents are in most cases inclined to send their children to school. The only aspect that many parents (including the illiterate ones) look for is the quality of education in schools. They are even prepared to tolerate weak infrastructure, but not ready to accept teacher indifference. Such an uncompromising attitude, though less extensive, speaks of increasing awareness regarding primary education.

One of the biggest challenges in UEE is pedagogy. According to the Unicef survey, due to force of circumstances multigrade teaching is adopted by around 67 per cent of the teachers interviewed in the rural areas, and by 56 per cent in the urban areas. The worst aspect of this method is that the students of different classes must sit together. While one class of students is being taught, all other classes must maintain silence. The lessons rotate until all classes are taught within the given time. The problem intensifies as the student–teacher ratio increases. However, if children are grouped according to subject matter or by ability, multigrade teaching may be a feasible solution for overcrowded schools—but only if teachers are adequately trained for the purpose.

The Unicef survey reveals that average pupil–teacher ratio in the elementary school varies substantially between rural and urban areas in the state. While the ratio is 28:1 for urban areas, it is as high as 47:1 for rural areas. The combined average is around 40–42:1.³

Coupled with failing pedagogy, occasional gross indifference or negligence of teachers makes the learning process inefficient. Some teachers are even in the habit of drinking liquor (in Bhilwara) during school hours. Teacher absenteeism and late arrival at school are also factors. A FGD with the villagers/parents in all selected villages revealed much qualitative data. Almost everywhere, villagers expressed their disenchantment with the government schools on the ground that teachers seemed uncommitted and unable to manage properly.

Such a situation largely explains why parents are willing to send their children to private schools even in the rural areas. Mangal Yadav from the Barauli Char village of Bharatpur district stated: 'Neither the school is good nor the teachers and their teaching. We have lost our trust in government schools and have started sending children to private schools'. It is true that not all parents can afford to send their children to private schools since school fees are higher. Therefore, quality improvement is a must. Jagjit from

Talphara village of the same district observed: 'Government spends so much money on government schools and villagers send children to private school because teaching is better there'. According to him, the government should improve its schools and put a restriction on private schools.

A set of common complaints was echoed in all FGDs about government schools: (a) shortage of teachers; (b) lack of facilities such as drinking water and class rooms; (c) no proper administration, vigilance or surprise checks by the BEO (Block Education Officer) and DEO (District Education Officer); and (d) lack of commitment by teachers concerning the school and its students. This lack of commitment is reflected in teacher absence and makes a difference to an atmosphere conducive to learning.

Higher promotion rates in government schools in the rural areas do not reflect the quality of education. The universalisation of quality education in qualitative terms is as important as the universalisation of access and retention. In this context, observations made by Shankar Salvi of Bhagid village (Bhilwara District) are important to note. He says, 'Our child is going to Class 5, but he does not know how to count numbers properly. Imagine, what the teacher teaches!' Much more damaging is what one mother, Gattu, an illiterate housewife of Kalundiya village of Bhilwara district, said: 'Teachers smoke and drink liquor in front of the growing children. Contrary to inculcating good habit, these actions lead children to acquire habits that ruin their lives'.

These problems are almost same in Lambiya village of Pali district where illiteracy, accompanied by poverty, breeds absolute indifference towards education. However, according to villager Bhanawarlal Tonk:

Outwardly, the school gives the impression of excellent functioning with well-maintained building and infrastructure, but hardly any teaching or learning takes place there. Teachers relax the whole day and children also relax with nothing worthwhile to do.

It appears that the Lok Jumbish, under way since 1992 and functioning in 13 of 27 districts of Rajasthan, has not had the requisite effects. This programme, literally meaning 'people's movement', is built around the core ideas of de-bureaucratisation and thoughtful decentralisation of decision-making in primary education.

The main component of the programme has been quality improvement in formal schools, in the social environment, and women's empowerment. An important aspect of the Lok Jumbish programme has been the recognition that quality in education is linked to teachers' abilities and attitudes. The teachers are supposed to be participating in many key Lok Jumbish activities, from school mapping to planning. Lok Jumbish adopted Minimum Levels of Learning (MLL) as its curriculum framework, and has also tried to give teachers more ownership and control of their training. It has made a positive contribution through the development of improved MLL based textbooks for Classes 1–4, which are being used in all schools in Rajasthan (Planning Commission, 2002).

However, teachers seem not to have fully understood the importance of pupil evaluation, and pay limited attention to MLL. Further, while Lok Jumbish has avoided using pressure tactics to mandate participation of teachers, it has at times failed to evoke their voluntary cooperation and involvement in school improvement projects (Government of Rajasthan, 2002).

4. PUBLIC EXPENDITURE ON ELEMENTARY EDUCATION

The Draft Report of the Ninth Five Year plan admitted: '[Rajasthan is] one of the leading states in the country in terms of budgetary support being provided to the education sector. Yet, the state continues to be an educationally backward state...' (Government of Rajasthan, 1997).

Table 4.7 shows no significant improvement in the pattern of budgetary allocation for education since 1980.

Table 4.7 shows that budgetary expenditure on elementary education increased by little over 1 percentage point (revenue account) during the last 20 years, and by 2 percentage points when the revenue and capital account are combined. The share of expenditure on elementary education in education declined after the Sixth Five Year Plan. During the period 1980–85 (Sixth Five Year Plan) the share of elementary education was 60.25 per cent. In subsequent years, it declined to 53.32 per cent and then rose marginally by 3 per cent in the following years. It appears that during Eighth Five Year Plan and the early Ninth Five Year Plan, the ratio of expenditure on elementary education to total education was static (56 per cent).

Table 4.7
Budgetary Expenditure on Elementary and Total Education (1980–2000)
 (in Rs million)

<i>Item of Expenditure</i>	1980–85	1985–90	1993–97	1997–2000
Expenditure on Elementary Education	5,662	11,627	34,836	44,661
Expenditure on Total Education	9,395	21,806	62,174	79,433
Percentage of Expenditure on Elementary Education to Expenditure on Total Education	60.3	53.3	56.0	56.2
Total Budgetary Expenditure (Revenue Account)	48,664	111,854	294,013	343,144
Total Budgetary Expenditure (Revenue + Capital)	66,195	138,082	363,748	422,368
Percentage of Expenditure on EE to Budgetary Expenditure (Revenue)	11.6	10.4	11.9	13.0
Percentage of Expenditure on EE to Budgetary Expenditure (Revenue + Capital)	8.6	8.4	9.6	10.6
Percentage of Expenditure on Total Education to Budgetary Expenditure (Revenue)	19.3	19.5	21.2	23.2
Percentage of Total Education to Budgetary Expenditure (Revenue + Capital)	14.2	15.8	17.1	18.8

Source: Statistical Abstract and Budget Study, Government of Rajasthan. Data for 1980–85 was collected from 'Progress of Education—40 years', Directorate of Primary and Secondary Education, Government of Rajasthan.

Note: Data on expenditure does not include funding from external sources. Funds received from central government are included.

The expenditure on total education compared to budgetary expenditures (both revenue and revenue plus capital) appears to have gradually increased over the years. It was 19.31 for the revenue account in the period 1980–85 and increased to 23.15 per cent over 1997–2000 (an increase of 4 to 5 per cent). However, the budgetary expenditure of 23.15 per cent was only marginally higher than what it was from 1957–58 to 1960–61: the percentage of budget spent on education was around 21 to 22 per cent (Government of Rajasthan, 1955–56; 1960–61). In terms of according government priority, education continues to lag behind other sectors.

Another important aspect of educational expenditure is that there has been no significant increase in the share of educational expenditure to state domestic product. Table 4.8 shows that the share of budgetary expenditure of elementary education and total education in net state domestic product were 2.65 per cent and 4.71 per cent respectively, during 1997–2000. These are higher than the national average, but the state's needs are also greater.

Table 4.8

Share of Budgetary Expenditure of Education in Net State Domestic Product

<i>Category</i>	<i>1980–85</i>	<i>1985–90</i>	<i>1993–97</i>	<i>1997–2000</i>
NSDP (Rs million)	28,529	52,176	138,487	168,602
Expenditure on Elementary Education/NSDP (%)	2.0	2.2	2.5	2.7
Expenditure on Total Education/NSDP (%)	3.3	4.2	4.5	4.7

Source: Same as Table 4.7.

Expenditure: Plan versus Non-plan

The plan allocation is indicative of the systematic growth of development processes in any chosen sector, while non-plan allocation sustains such processes. Non-plan expenditure is normally referred to as recurring expenditure. The analysis on plan and non-plan expenditure is done here for each level of education: elementary, secondary and higher education. Technical education has not been included, and involves a minimal share in state expenditures.

Table 4.9 shows that the plan expenditure in elementary education increased by 5 percentage points during 1993–97 over the previous period, and then declined by 4.42 per cent in 1997–2000 (early Ninth Five Year Plan). This rise and fall for plan expenditure occurred at each level of education. Secondary education was hit the hardest when it witnessed a decline in plan expenditure from 17.2 per cent in 1993–97 to 6.93 per cent in 1997–2000. Although the plan expenditure in respect of higher education declined to 7.72 from 9.42 per cent during the corresponding years, it remained higher than what it was during the first (1985–89) period. Comparatively, the cut was by 4.42 per cent for elementary education while for higher education it was 1.7 per cent.

Table 4.9
Plan and Non-plan Expenditure by Level of Education (1985-2000)

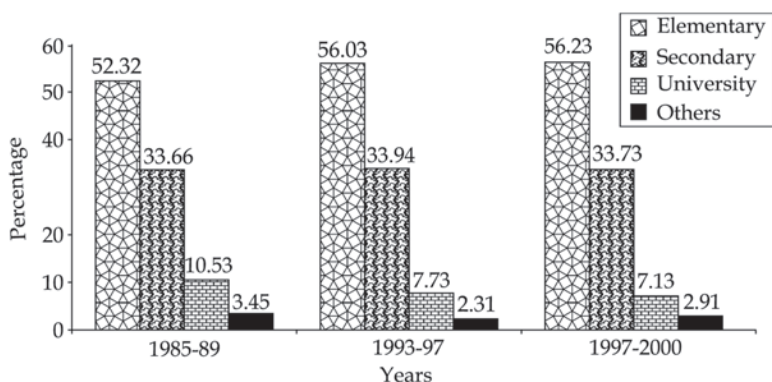
Level of Education	1985-86 to 1988-89		1993-94 to 1996-97		1997-98 to 1999-2000				
	Plan	Non-plan	Total	Plan	Non-plan	Total			
Elementary	890.9 (10.45)	7,638 (89.55)	8,529	5,215 (15.75)	27,901 (84.25)	33,116	4,974 (11.33)	38,926 (88.67)	43,900
Secondary	636.8 (11.39)	4,959 (88.61)	5,595	3,592 (17.2)	17,293 (82.80)	20,885	1,845 (6.93)	24,795 (93.07)	26,639
Higher Education	101.6 (5.81)	1,646 (94.19)	1,748	446.6 (9.42)	4,294 (90.58)	4,740	433.9 (7.72)	5,184 (92.28)	5,618
Others	149.6 (35.27)	274.5 (64.73)	424.1	379.8 (36.30)	666.6 (63.70)	1,046	930.5 (49.76)	939.6 (50.24)	1,870
Total	1,779 (10.92)	14,517 (89.08)	16,296	9,633 (16.11)	50,154 (83.89)	59,787	8,183 (10.49)	69,845 (89.51)	78,027

Source: Same as Table 4.7.

Note: 'Others' include physical, adult and Sanskrit education, art and culture etc. Data pertaining to 1985-89 and 1998-99 is revised. Data pertaining to 1999-2000 is proposed. Some figures have been rounded. Figures in parentheses are in per cent-share of Plan and Non-plan expenditure in total expenditure.

Table 4.9 shows plan and non-plan expenditure for each level of education excluding central assistance. Even if central assistance is used in the total expenditure incurred towards elementary education, no worthwhile improvement occurred from 1993 until recently. In Figure 4.1, percentage shares for each level of education are compared when plan and non-plan expenditure and central assistance are taken together.

Figure 4.1
Share for Each Level of Education in Total Educational Expenditure of the State (1985–89 to 1997–2000)



Source: Same as Table 4.7.

The increase in share of elementary education during 1993–97 as shown in Figure 4.1 was possible due to significant assistance provided by the central government to the state for promotion of elementary education. For a state that has one of the lowest rates of female enrolment in elementary schools in the country, despite the progress made in the 1990s, the share of secondary education in total government education spending is high. Thus it is understandable for Tamil Nadu (TN) or Kerala to allocate a third of public education spending to secondary education (Bashir, 1994), given their high secondary enrolments. However, there is less justification for Rajasthan to be doing so.

Table 4.10 shows that as much as Rs 1,720 million were given to state during 1993–97 for elementary education, while the state received Rs 214.5 million and Rs 63.8 million from the central government for secondary and higher education respectively.

Table 4.10 shows central assistance as a percentage of plan expenditure for each level of education. The share of central assistance in plan expenditure was as high as 19.3 per cent during 1985–89, rose to 33 per cent in 1993–97, but fell steeply by 15.3 per cent in the following period.

It may be noted that the state received external assistance (especially from SIDA [Swedish International Development Agency]) to a considerable extent from 1987 onwards in order to popularise shiksha karmi project (SKP) and lok jumbish programmes. While SKP was started in 1987, lok jumbish launched its activities in 1992. In both educational programmes, the government of Rajasthan and SIDA shared financial responsibilities (although in different proportions).⁴

While one can hardly discount external assistance contributions made by these two programmes, the extent to which investment is still required is great. The District Primary Education Programme (DPEP) is now an additional route through which the state has proposed to receive Rs 8,800 million from external sources from 1997–2000 (Ninth Five Year plan).

However, one is not certain how the dwindling size of plan expenditure will ensure universal access and retention in elementary education as nearly 90 per cent of the total expenditure on education was earmarked for meeting non-plan expenditure. The state seems to have been caught in a distressing development scenario as the largest share of the budget goes towards payment of salary, and construction of additional schools is virtually at a standstill. There is a definite trend of increase in gross enrolment, which is why student–teacher ratio (especially in the primary section) has also risen over the last few years.

The increasing student–teacher ratio, the absence of multiple-teacher schools, teacher absenteeism, and low efficiency levels reflect the poor quality of education in government-run schools. Despite this, teacher salaries on an average have doubled in past years, from Rs 28,083 in 1993–94 to Rs 58,698.48 in 1998–99.

Public Expenditure Per Student

The allocative pattern of budgetary resources is biased against elementary education. This is shown also by budgetary expenditure

per student for each level of education in real terms (Table 4.11). The real expenditure per student as shown in Table 4.11 is estimated by means of deflating expenditure given in monetary terms by wholesale price index of non-food articles (1981–82=100) of corresponding years. Expenditure per student has primarily increased in the 1990s.

Table 4.11
Budgetary Expenditure Per Student in Real Terms at Level of Education (1981–82=100)

<i>Year</i>	<i>Elementary</i>	<i>Secondary</i>	<i>Higher Education</i>
1985–86	300.4	1720.2	NA
1988–89	355.4	836.0	NA
1989–90	382.4	796.0	NA
1993–94	534.8	NA	3943.4
1994–95	514.8	931.8	3089.2
1996–97	546.4	1125.1	2725.3
1997–98	613.9	1833.5	2702.8

Source: Government of Rajasthan, 1997–98; RBI (1999).

Real expenditure per student incurred by the state for secondary education was three times more than that of elementary students, and was more than four times higher in respect of higher education per elementary student during 1997–98. However, these are not unusual numbers by international standards for higher education, though they are for secondary education.⁵ But the real issue here is that Rajasthan remains one of the most backward states in elementary education. Hence it needs to mobilise more resources than other states. But among the eight states examined by Srivastava (2005), it appears that during the 1980s the level of per child and per capita elementary education expenditures by the Rajasthan government were comparable to that of other states examined here. While the rate of growth of these indicators fell during the 1990s in the rest of the states in the wake of the structural adjustment (which started in 1991), in Rajasthan it did not—perhaps one of the factors underlying the good performance of the state relative to other states in the 1990s.

5. HOUSEHOLD COSTS OF PUBLIC AND PRIVATE SCHOOLING

Table 4.12 presents an itemised average expenditure incurred by households per child for primary and elementary education in both

Table 4.12
Annual Average Household Expenditure (Direct Cost of Schooling)
Per Child
 (in Rs)

	Rural				Urban			
	Primary		Elementary		Primary		Elementary	
	Govt	Private Unaided	Govt	Private Unaided	Govt	Private Unaided	Govt	Private Unaided
School Development Fee	46.56	367.35	51.58	169.88	159.64	924.70	561.05	974.97
Books	31.58	160.88	65.00	58.71	69.96	206.11	172.83	213.12
Stationery	165.56	207.65	191.73	128.53	145.04	228.20	162.22	240.13
Uniform	355.21	417.06	389.78	237.94	267.35	360.25	275.00	372.63
Footwear	171.74	176.47	189.26	106.53	116.51	121.15	135.00	128.85
Out of Pocket Tour	67.83	48.82	76.00	17.18	27.82	14.43	13.33	14.04
Donation	10.22	20.00	11.44	2.60	2.83	12.21	1.67	12.76
Exam. Fee	6.09	24.12	7.85	16.60	18.05	37.13	49.75	45.64
Annual Festival	10.79	30.76	12.90	5.53	5.46	22.89	11.83	23.92
Sports	12.06	32.35	14.15	8.12	7.48	16.39	10.83	19.87
Transportation	4.03	11.76	5.16	25.41	18.82	18.52	0.0	17.05
Others	92.25	100.00	96.44	19.06	46.81	24.59	28.33	48.72
Total	973.93	1,597.24	1,113.38	796.08	885.77	1,986.57	1,424.35	2,111.69

Source: Unicef Survey, 1999-2000.

rural and urban areas. A rural household annually spends Rs 189.26 on footwear per child attending a government elementary school, while an urban household spends Rs 116.51 per child respectively. In this way, one finds a substantial difference in household expenditure between rural and urban areas. The average expenditure of the rural household per child attending government school is more than that of the urban household, despite development costs for urban students.

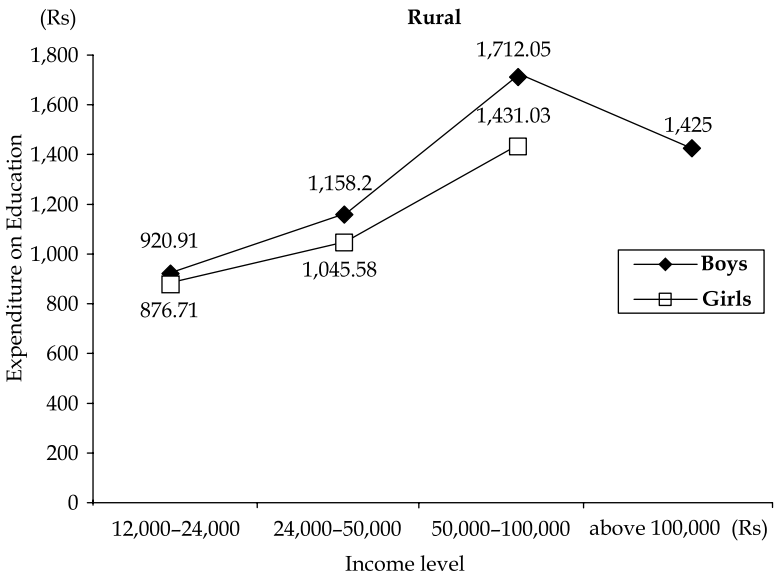
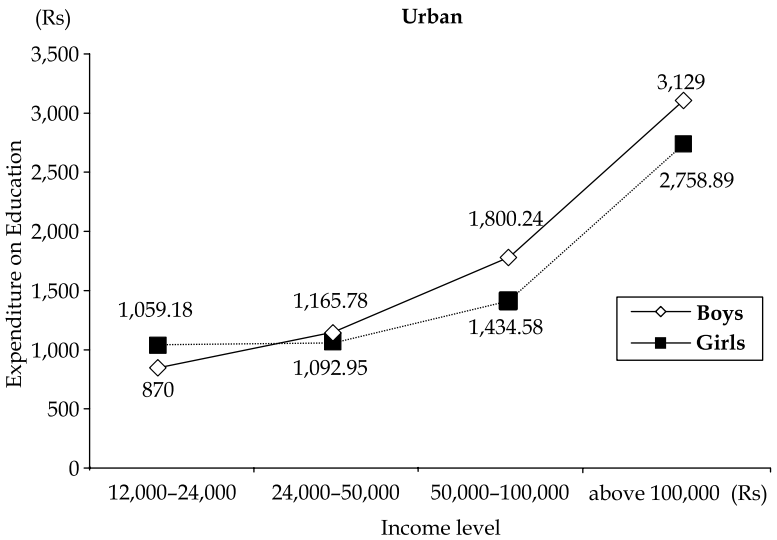
Table 4.12 also shows that average annual household cost per child is 64 per cent higher for private schools than for government primary schools in the rural area. It is Rs 973.93 per child in the government primary school and Rs 1597.24 per child in the private unaided school. The difference is Rs 623 for the rural areas, and Rs 1,190 in the urban areas, an excess which is actually above the entire cost of government primary school.

Rural households spend more on children's education for both primary and elementary education than urban households when in government schools. The average household cost per child in government primary schools in rural areas is Rs 974 and Rs 796 in the urban area. It is Rs 1,113 for elementary education in rural areas and Rs 886 in urban areas. The direct cost of schooling in government schools is comparatively higher in rural than in urban areas.

Household Expenditure and Demand for Elementary Education

It is difficult to assess the impact of household educational expenditure on enrolment and dropout based on the above analysis. However, an adverse impact is certainly felt by those households whose annual income falls within the range of Rs 12,000 to Rs 24,000. These households may be considered poverty-ridden or placed slightly above impoverished conditions. Two main issues here are of concern: the critical minimum household income required by the households to cover the opportunity cost of education, and the household motivation or willingness to educate their children. The first implies household affordability given the willingness, and the second deals with the motivation or willingness to provide education given its affordability.

Figure 4.2
Household Income: Expenditure on Elementary Education



Source: Unicef Survey, 1999-2000.

In any case, the analysis presented in Figure 4.2 shows household ability to pay for education as a factor that is central to the demand for elementary education. This applies to both boys and girls, but is more significant for girls. A distinct pattern seems to be emerging from the analysis on enrolment and dropout. The survey reveals that households whose social backgrounds are SC and ST, who are illiterate, and households of agricultural labourers, manual skilled workers and farmers are relatively less enthusiastic about their children's education. They are less prepared to spend on their children's education. The annual expenditure incurred by these households per child is less than the others.

Figure 4.2 shows that expenditure on girls' education declines in the rural areas, even for households who are better off—probably only because girls are withdrawn for cultural reasons. However, such a situation does not exist in the urban areas.

6. EDUCATIONAL REFORMS

Rajasthan state had introduced innovative programmes like shiksha karmi and Lok Jumbish—that were externally funded—much earlier than other states. Perhaps as a result, the externally-funded DPEP was not introduced in Rajasthan until 1999. Although DPEP was launched in the country in 1994, Rajasthan was not part of either Phase 1 or Phase 2.

One may not see any distinctive difference between DPEP and other previous programmes meant to achieve similar goals. However, the important aspect of DPEP is that it attempts to learn from and improve on these earlier programmes. Operationally speaking, it desires to encompass all other programmes gradually and eventually create a common forum for universalising primary education in the state, especially for disadvantaged groups of children such as girls, SC, ST working children and minorities.

One of the important features of DPEP is to strengthen the alternative schooling system. Alternative schools will be opened in places where eligible school-going children exist, but governmental norms do not support the opening of a new primary school (small habitation and therefore not cost effective) and too much rigidity in formal system regarding time and duration exists. It is proposed that full day (6 hours) alternative school centres will start on the

pattern of *angan pathshalas* of shiksha karmis. The population norm for creating an alternative school is 100. If the number of eligible children of the relevant age group falls short for the regular six hours of teaching (in case of working children and child labour), a four-hour alternative centre is proposed.

DPEP also plans to mobilise the community as a team. The team is proposed to be formed by (a) two representatives from gram sabha (at least one female); (b) two ward members of gram panchayat (at least one female); (c) a representative from a youth organisation and (d) one social worker/activist. An Inter-sector Facilitating Team (IFT) comprising of one school teacher, anganwadi worker, multipurpose health worker, a local NGO, and forest and soil conservation workers will also help community mobilisation. The community may also participate in civil work.

While the attempt will be to strengthen the existing system of teaching and supervising, the educational department will assimilate the new structure created under DPEP as it phases out. DPEP will strengthen the *guru-mitra* initiative, have partnership with SKP and build on lok jumbish. A program called the 'Back to School Programme' has been conceived for children 6–14 years old (especially girls of SC/ST/minority) who are out of school or have dropped out at a slightly later stage. They will be motivated to join education through a condensed course, which should prepare them for formal school.

As a part of the systemic reforms, an important step in universalising primary education is the creation of Rajiv Gandhi Pathshalas. The minimum qualification of teachers is Class 8, and they are selected from the concerned locality by *sarpanch* and *ward panch*. Children who are admitted to these *pathshalas* are taught up to Class 11.

Outside of administrative changes due to UEE, the Government of Rajasthan has decided to form management committees for each primary and upper primary school under the chairmanship of *sarpanch*. The members of the management committee will be drawn from the concerned *ward panch*, include the chairman of the Parent-Teachers' Association (PTAs) and two teachers from the school. The headmaster of the school will be a member and secretary of the committee. In those schools where the number of teachers exceeds two, teachers whose children are studying in the same school will be selected for becoming member of the committee. One of

the major responsibilities of the committee is to ensure universal access for and retention of the children in the same locality. For improving elementary education quality in the state, the government has introduced the system of common examinations for the students of Class 8 at the district level following the current Board level pattern. This examination is managed and supervised by DIET (District Institute for Education and Training) in each respective district.

The Government of Rajasthan seems to be increasingly concerned about community involvement. In order to encourage community contribution to the development of elementary education in the state, the government now implements a new programme called *Bhamashah Yojna*. The objective is to create a common fund from individual contributions at the district level. Money collected would be used for any purpose relating to the educational development at the elementary level in the district. The government has also changed its norm for community contributions to the development of school infrastructure or renovation. According to the earlier norm, the government used to spend 50 per cent of the expenditure while the rest used to be borne by the community. Now the government would bear 70 per cent of the total cost while 30 per cent would have to be borne by the local community.

7. CONCLUSIONS

The state will have to deepen its budgetary commitment for resource mobilisation to a desirable extent. However the most important agenda is to create a larger space for community involvement in the entire exercise. The spirit of partnership between the government, local bodies (panchayati raj institutions) and civil society needs to be strengthened in order to complete UEE. Experiences as documented in the present study and elsewhere exemplify the potent force of people, which strongly complements the process of educational development in the state.

As a part of the process of decentralisation, links must be formed within the formal structure down to the cluster level. The formation of clusters has been visualised by the government and would bring people and government functionaries together in the same forum for the sake of achieving UEE.

The allocation of resources and resource mobilisation are significant and need attention. An example of the problem where allocation is the 'paper' schools without any enrolled students, but where teachers are being paid (Singhi and Chandra, 1999). A restructuring of the system should be accompanied by rationalisation of resources.

The government may restructure the existing pattern of spending in order to improve quality of education. Further investments on educational inputs such as training and management are unavoidable, although educational tools also need investment. While providing incentives such as scholarships, government should consider merit as well as the financial conditions of children.

Restructuring spending patterns should improve resource effectiveness, but it may not fulfil total resource requirement. This implies that there is a need for resource mobilisation from various sources, which could perhaps be carried out at the local level. Resources should go towards quality improvement of elementary education system in the state as development expenditure for elementary education has declined over the past decade. It is also necessary to take a fresh look at how linkages of the aided schools (which have dramatically declined) could be further strengthened with the government. This suggests a reorganisation of support structures to the aided schools and a change in the government policy for grants-in-aid.

Notes

1. This analysis is carried out on the basis of field observations.
2. According to the Directorate of Primary Education (Rajasthan Government), in 16 out of 32 state districts, more than 50 per cent of private primary schools were located in the rural areas in 1997-98. In 10 districts, more than 50 per cent of the upper primary schools under private management were located in the rural areas. Jaipur, Alwar and Bharatpur had the highest concentration of both unaided primary and upper primary schools, and yet in terms of regional concentration (rural and urban) within the districts, the scenario differs. Only 10 to 20 per cent of primary and upper primary schools under unaided private management are concentrated in rural areas of Jaipur. Hence, the entry of the private sector into elementary education is predominantly an urban phenomenon for the Jaipur district. However, the situation again differs for Alwar and Bharatpur. In these districts, 70 to 80 per cent of private primary schools and 50 to 60 per cent of upper primary schools are concentrated in

rural areas. The entry of private sector here is largely a rural phenomenon, and reflects perhaps that the entry into rural areas occurs primarily within the prosperous districts of the state.

3. The severity of the problem may be gauged by the Annual Progress Report published by the Directorate of Education in Rajasthan. It is reported that student-teacher ratio in primary schools for the state as a whole was 65:1 during 1993-94, 70:1 during 1996-97 and 75:1 during 1998-99.
4. For phase 1 of SKP (1987-94), 90 per cent was financed by SIDA and 10 per cent by the Government of Rajasthan, the ratio was 50:50 for Phase II (1994-98). However, for Lok Jumbish, the proportion was 3:2:1 (SIDA: central government: Rajasthan Government). As much as Rs 519.3 million and Rs 550 million was received from SIDA until 1998 June for implementing SKP and Lok Jumbish respectively. Around Rs 1,070 million total was received from SIDA to supplement mainstream educational programmes for achieving UEE.
5. In fact, higher education per student expenditures have declined, and secondary education per student expenditures do not show a rising trend since the mid 1980s.

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5 Universalising Elementary Education in Madhya Pradesh: Can the Successes of Decentralised Governance Offset the Problems of Public Finance, Private Provision and Private Cost?

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1. INTRODUCTION

Madhya Pradesh (MP), the largest state of India,¹ is one of the poorest states of India,² and has been known as one of the so-called Bimaru states (Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh)³—though, given the pace of progress in elementary education and literacy in the 1990s, it may soon be shedding that label. It also holds the largest tribal population in the country. The Scheduled Tribe (ST) and Scheduled Caste (SC) population make up nearly 24 per cent of the total population and is mostly located in rural areas.⁴ MP was also one of the least developed states in terms of literacy. The literacy level was 44 per cent in 1991, which was well below the national average. Of most concern was the extremely low literacy level of the female population. While male literacy was 64 per cent, female literacy was barely 28 (1991). Also, there is a large disparity between rural and urban areas. Hardly 20 per cent of women were literate in rural areas, while in the urban areas, 59 per cent were literate.

However, in the 1990s the gap between the national and MP literacy rate, which had existed since independence, was closed. Literacy rates increased by 20 percentage points, which is the highest increase for any state (except Rajasthan) in the decade between

Census 1991 and Census 2001. While MP's female literacy rate (50 per cent) still remains below the national average (55 per cent), the male–female gap that had been rising since 1961 began to close for the first time.⁵ This has been the result of innovative programmes to increase access to schooling and literacy, but also the result of successful efforts to effectively decentralise the delivery of basic services generally.

This chapter is based largely, but not only, on the Unicef survey (see Appendix 5A-1). Section 1 presents the current education level and quality of schooling through Net and Gross Enrolment Rates (NER/GER), dropout and never-enrolled rates and the disparities between gender, location (that is, urban–rural) and socio-economic level. Section 2 focuses on expenditures on elementary education for the three types of school management: government, private aided and private unaided, and their impact on the education level. Section 3 analyses the cost of elementary education from the perspective of a household. Section 4 describes people's perception about the quality of elementary education. This information stems from the Focus Group Discussions (FGDs) held in the various villages. Section 5 presents the trends of government expenditure on elementary education during the 1980s and 1990s. Section 6 summarises the various government initiatives for Universal Elementary Education (UEE) with a special emphasis on the successful Educational Guarantee Scheme (EGS). The final section presents policy recommendations aimed at achieving UEE.

Table 5.1
Progress of Elementary Education in Madhya Pradesh
 Primary GER and NER of selected states, 1995–96 (%)

State	State		Urban		Rural	
	GER	NER	GER	NER	GER	NER
Andhra Pradesh	86	70	101	82	81	66
Bihar	54	41	78	58	51	39
Madhya Pradesh	84	63	102	76	80	59
Orissa	75	61	92	76	73	60
Rajasthan	74	55	100	76	68	51
Uttar Pradesh	80	59	90	68	79	58
Gujarat	95	78	100	84	93	75
Maharashtra	106	85	108	86	105	85
Kerala	109	91	109	92	109	91

Source: NSSO (1998).

Compared to the National Sample Survey (50th Round) of 1995–96, the Unicef survey of 1999 shows a remarkable increase in enrolment. Thus at the primary level, the most important growth has occurred in rural areas. But both rural and urban GER and NERs have caught up with what they were in the more educationally advanced states of Gujarat, Maharashtra and Kerala in 1995–96 (Tables 5.1 and 5.2).

However, by looking at the differential between enrolment at the primary and upper primary levels, it is clear that children do not complete elementary schooling. The enrolment of children declines considerably at the upper primary level. The GER at the primary level was 106, while at the upper primary level it was 98 per cent (Table 5.2); that differential was much greater in rural areas. The same trend was found for the NER.

Another important distinction is the smaller primary level disparity between the NER and GER compared to the gap at the upper primary level.⁶ This might be attributed to the large percentage of over-age repeaters at the upper primary levels.

Table 5.2
GER and NER by Location and Level—Comparing 1995 with 1999 (%)

Level	GER		NER	
	Urban	Rural	Urban	Rural
Unicef Survey				
Primary (Classes 1–5)	106.4	98.2	85.7	73.3
Upper Primary (Classes 6–8)	97.6	63.2	55.4	35
NSSO Survey				
Primary	102	80	76	59
Upper Primary	79	50	56	28

Source: Unicef Survey, 1999–2000.

The NER and GER were generally lower for the SCs, STs and Other Backward Castes (OBCs) as compared to 'others' (that is advanced castes). Moreover, there were cases where ST and OBC enrolment rates were larger in rural areas than in urban areas. This might imply that the school system has partially succeeded in some rural areas and with some of the tribal population. On the contrary, the gap between urban and rural areas at the upper primary level was wider and particularly worrying in the case of backward castes. For instance, while ST gross enrolment in urban areas was 113 per cent, it was 38 per cent in rural areas (Table 5.3).

Table 5.3
GER and NER by Caste and Location (%)

<i>School Level/Caste</i>	<i>GER</i>			<i>NER</i>		
	<i>Urban</i>	<i>Rural</i>	<i>Total</i>	<i>Urban</i>	<i>Rural</i>	<i>Total</i>
Primary						
SCs	81	76	79	64	59	62
STs	62	74	72	44	62	60
OBCs	76	85	81	63	67	65
Others	80	83	81	63	69	66
Upper Primary						
SCs	68	50	60	26	43	33
STs	113	38	48	75	30	36
OBCs	56	44	49	34	32	33
Others	73	58	67	45	35	41

Source: Unicef Survey, 1999–2000.

Backward castes, especially SCs and STs, were the groups with the highest never-enrolled rates and 'dropout' rates compared to the advanced castes.⁷ The comparison between primary and upper primary levels showed that the dropout rate was higher for primary level. As for never-enrolled rates, these were equally high among both elementary levels (Table 5.4). But the most striking fact is that the never-enrolled share far exceeds those who dropped out. This finding is consistent with the proponents of the Education Guarantee Scheme, EGS, (in government) who argue that the problem in the 1990s and before was not so much dropout of children (which was what was assumed to be happening based on flawed administrative records of inflated enrolment), but simply that the children were never enrolled at all—since the schools were inaccessible to the children.

Table 5.4
Dropped Out or Never Enrolled at Primary Stage, by Caste (%)

<i>School Level/Caste</i>	<i>Dropout</i>		<i>Never Enrolled</i>	
	<i>Urban</i>	<i>Rural</i>	<i>Urban</i>	<i>Rural</i>
SC	14	4	15	31
ST	15	8	31	25
OBC	8	6	24	23
Others	4	3	22	23
Total	9	6	21	25

Source: Unicef Survey, 1999–2000.

As we noted at the beginning, 50 per cent of MP's female population was still illiterate in 2001. In fact, of the major Indian states, only Bihar (33.6 per cent), UP (43 per cent), and Rajasthan (44.3 per cent) had worse female literacy rates. Both MP and Rajasthan made the largest gains in female literacy over 1991–2001 of any state in India—showing 22 and 24 percentage point gains in literacy respectively. However, Table 5.5 shows the distance MP's girls still have to travel.

There was considerable gender disparity in rural areas. For instance, the GER at the rural primary level for boys was 107⁸ compared to 88 for girls (Table 5.5). At the upper primary level, the GER was also greater for boys (75 compared to 50 for girls). Similar differentials were found for the NER in rural and urban areas. At the primary level in rural areas, the NER for boys was 79 compared to 67 for girls. In urban areas, the gender disparity was smaller. Overall, GER and NER figures for SC and ST girls were lower than the figures for girls of advanced communities.⁹

Table 5.5
NER and GER by Gender (%)

	Urban		Rural	
	Male	Female	Male	Female
GER (Primary Level)	109	104	107	88
GER (Upper Primary Level)	99	96	75	50
NER (Primary Level)	87	84	79	67
NER (Upper Primary Level)	55	56	39	30

Source: *Unicef Survey, 1999–2000.*

The comparison between boys and girls in terms of dropout rates shows that girls will more likely interrupt their elementary education. In the same way, the incidence of being never enrolled is higher for girls, and therefore the mere enrolment of girl children is less significant because they are usually withdrawn before they realise the full benefits of primary schooling. As a result, it is likely that girls would lose their literacy skills, as four years of schooling is generally considered the minimum period for the retention of literacy.

Analysing household-related variables (such as income, birth order, parents' education level, occupation and availability of schools per location) helps to understand the education indicators.

According to our analysis based on income groups, enrolment was higher for the richer households than for the households with below average income. This was true for both rural and urban areas and for boys and girls. Another important household variable that might influence enrolment is parental occupation in the formal and the informal sectors. Enrolment was higher among households employed in the formal sector rather than in the informal sector. The enrolment rate was 64 per cent among households employed in the informal sector, while it was 81 per cent among households employed in the formal sector. In the same way, the dropout and never-enrolled rates were consistently higher if the parents were employed in the informal sector.¹⁰

Regarding the birth order variable, there seems to be a correlation between low attendance, high dropout and never-enrolled ratios for the first born children. We generally observed that the older children in the family suffered some discrimination.¹¹ For example, while 89 per cent of the first born attended primary school, the corresponding rates were 93, 95 and 94 per cent for the second, third, and fourth borns. By and large, first-born girls faced lower enrolment and higher dropout and never-enrolled rates. Hence, an effective policy should give incentives to parents for sending and retaining first-born children in school in order to avoid a 'lower educational propensity for the first born'. No general statement could be made in terms of household size. Enrolment, whether in the case of a large or small household, is dependant on the educational culture.

In respect of the parents' level of education, enrolment percentages are higher for children whose parents have completed more than elementary education.¹² The percentage of enrolled children whose parents completed elementary education was 68 per cent, while 84 per cent of the children whose parents completed more than elementary school were enrolled.

Another crucial element that influenced primary enrolment rates was early childhood enrolment. Our econometric results suggested that pre-primary education might improve enrolment in elementary education in the case of less developed states (Appendix 5A-2). Moreover, pre-primary enrolment was particularly effective in promoting enrolment at the elementary stage in the case of girls.

According to data from the Department of Education, pre-primary GERs were at the extremely low level 15.6 per cent overall, with 19 per cent for boys and 13 per cent for girls.¹³ Despite the government initiative that took place in 1986 as part of the National Policy on Education, and in 1992 as part of the Programme of Action, the progress achieved in MP was not satisfactory.

The school availability in rural and urban areas presents another aspect of state backwardness. While rural population in MP is nearly 77 per cent of the total population, the total number of educational institutions in rural areas is just 67 per cent of the state-wide total. This inadequacy is the most glaring with figures for specific types of educational institutions. Rural primary schools constituted only 70 per cent of the total, and corresponding middle and high schools figures were even lower: only 60 and 51 per cent of total middle and high schools respectively were located in the rural areas.

While tribal population constituted about 24 per cent of the total population, the tribal department run schools were just 20 per cent of the total number of schools. It is true that tribes can enrol themselves in non-tribal schools, but in view of the special facilities which need to be provided for the enrolment and retention of tribal children, there should exist more tribal department run schools for promoting education of tribal children. Of the total number of schools, just 22 per cent of primary schools, 16 per cent of middle schools, 13 per cent of high schools, and 12 per cent of higher secondary schools are run by the tribal department. Perhaps this is the reason that the EGS was most popular among tribal areas, and particularly successful in enrolling tribal children (as we discuss later).

Moreover, according to the Sixth All Education Survey, MP does not present a strikingly different picture in terms of the availability of schooling facilities within a reasonable distance when compared to other states. Data shows that more than 18 per cent of habitations do not have a school within a 1 km radius, which is considered to be an easily reachable distance for young children. For as many as nearly 7 per cent of the population, primary schooling facilities are not available within that easily accessible distance. In the majority of areas (about 82 per cent), the majority of the people (about 94 per cent) are served by primary schools within 1 km.

2. ROLE OF PRIVATE SECTOR IN ELEMENTARY EDUCATION

As mentioned above, schools are categorised by three types of management: government, private aided and private unaided. Enrolment-related and teacher-related variables such as enrolment rates, school facilities, building conditions, teacher qualifications, experience and attendance help to distinguish them.

Table 5.6
Enrolment by School Type and Location (%)

<i>Type of School</i>	<i>Rural</i>	<i>Urban</i>
Government	88	68.4
Private Aided	3	12.2
Private Unaided	9	19.3
Total	100.0	100.0

Source: Unicef Survey, 1999–2000.

Table 5.6 shows that in urban MP, the share of private schools is much higher than in rural areas. Only 9 per cent of all children enrolled in rural areas are in private unaided schools. However, that share rises to nearly a fifth of all children enrolled in urban areas.

Of course, the government has taken a significantly greater initiative than the private sector in providing school facilities¹⁴ (Table 5.7). But in respect of the number of teachers per school, the student-teacher ratio and number of rooms per school, government schools presented a relatively worse picture compared to private aided and unaided schools. There were approximately six teachers in government schools, compared to 16 and 10 teachers per school in the private aided and unaided schools respectively. The highest student-teacher ratio was 31 in government schools, compared to 25 and 18 in private aided and unaided schools. While private schools had an average of seven to eight rooms per school, government schools had only three.

The nature of the school buildings (arranged by management style) showed that the majority were *pucca* buildings (Table 5.8), especially in private aided and unaided schools. By contrast only half of government schools were *pucca* (51 per cent), while the others were semi-*pucca* (41 per cent) and *kutchra* (8 per cent).

Table 5.7
General Profile of Schools

	<i>Number of Schools</i>	<i>Teachers per School</i>	<i>Student-Teacher Ratio</i>	<i>Average Distance of School (km)</i>	<i>Rooms per School (number)</i>
Government	101	6	31	1.22	3
Private Aided	6	16	25	1.17	8
Private Unaided	23	10	18	1.00	7

Source: Unicef Survey, 1999–2000.

Table 5.8
School Building by Type of School (%)

<i>Management</i>	<i>School Building</i>			
	<i>Kutchha</i>	<i>Semi-pucca</i>	<i>Pucca</i>	<i>Open Air</i>
Government	7.9	41.0	51.0	1.0
Private Aided	0.0	17.0	83.0	0.0
Private Unaided	0.0	39.0	61.0	0.0

Source: Unicef Survey, 1999–2000.

Overall, government schools had the lowest quality of facility and building conditions. According to our physical facility index,¹⁵ government schools had the lowest rating (5.8), compared to private aided (7.7) and private unaided (7.4). The comparison between rural and urban areas among all types of schools, showed higher ratings for urban schools rather than rural schools. Finally, another important indicator of poor physical facilities was the level of overcrowding in the classrooms. Government schools had the highest level of overcrowding.

Teachers play an important role in enrolment levels. Both government and private schools recruited teachers with fairly good educational levels. The teachers' mean years of education ranged from 13 to 15 years. Teacher experience is another crucial indicator of teacher effectiveness. The average experience of teachers was 18 years in government schools, more than the 13 years in private aided schools and 4 years in private unaided schools. The conditions in the case of private unaided schools were miserable. It was very common to find that private unaided schools recruited a majority of young candidates.

The effectiveness of teachers depended also upon the number of assigned subjects. More than 40 out of every 100 teachers were

teaching more than five subjects in elementary schools, which must lessen the effectiveness of their role. The majority of the teachers in rural areas were male, whereas in urban areas, a majority were female. To make education more attractive for girls, more female teachers, who are more likely to play a role model for girl children, need to be recruited. The fact that in rural areas only 19 per cent of teachers were female in primary schools in MP does not augur well for the prospects of universalisation of elementary education in rural areas—given the already serious gender gap in MP relative to other states.

Table 5.9
Student–Teacher Ratio and Single-teacher Schools by Type of Management

Type of School	Students per Teacher		Single-teacher Schools	
	Rural (%)	Urban (%)	Rural %	Urban %
Government	41	27	17.4	1.8
Private Aided	27	24	0	25
Private Unaided	19	18	0	0

Source: *Unicef Survey, 1999–2000.*

Private unaided schools come out looking better than government schools in respect of both student–teacher ratio as well as the proportion of single-teacher schools in the Unicef survey (Table 5.9). In both respects, the situation is worse in rural schools as opposed to urban ones. Thus, the student–teacher ratio is 41 in rural government schools, and less than half that number in private unaided ones. As much as 17 per cent of government schools in rural areas are single-teacher schools in MP, while none of the private unaided ones is.

Thus, as in so many other states in the Hindi-belt of India, the private unaided schools seem attractive to parents who can afford them—or at least more so than government ones. This is despite the fact that the proportion of teachers who are well trained and have experience is much larger than in private unaided ones.

3. HOUSEHOLD COSTS FOR PUBLIC AND PRIVATE SCHOOLING

According to the Indian Constitution, educational opportunities should be given free of cost to all children below 14 years of age. However, the term ‘free of cost’ here means free of tuition fees.

This cost-free provision is mandatory only in the government-run schools and not in private schools. Beneficiaries exempt from tuition payments in government and aided schools do incur other type of costs, and cause some researchers to question the actual 'free primary education' (Panchamukhi and Debi, 1999; Tilak, 1999).

Another main finding was that expenditure for upper primary education was higher than for primary level education. The total expenditure for upper primary education was Rs 1,503, while the total expenditure for primary education was Rs 904 (Table 5.10). By and large, total expenditure on upper primary education was higher (almost double) in the urban areas. While the total expenditure in urban areas was Rs 1,832, in rural areas it was Rs 1,072.

In addition, for all the backward social groups (SCs, STs, and OBCs) the household costs were below the sample average, while for advanced communities, they were higher. The expenditure of households from the advanced communities was Rs 1,659 per year per child, which was almost double the expenditure of the backward castes. SCs spent Rs 881, STs spent Rs 731 and OBCs Rs 767 per year per child.

Table 5.10
Direct and Indirect Household Expenditure by Location and Level
(Rs per child per annum)

<i>Area</i>	<i>Class</i>	<i>Direct Expenditure</i>	<i>Indirect Expenditure</i>	<i>Total Expenditure</i>
Rural	1-5	189	374	572
	6-8	467	590	1,072
	1-8	241	416	667
Urban	1-5	853	458	1,308
	6-8	1,222	609	1,832
	1-8	954	500	1,451
Total(R+U)	1-5	483	411	904
	6-8	895	601	1,503
	1-8	577	455	1,042

Source: Unicef Survey, 1999-2000.

Note: Direct: School development fees, stationery, exam fees, transportation; Indirect: uniform, footwear, donation, annual festival, sports.

'Direct costs' involved in elementary education from the household's perspective include: fees, books, stationery, examination fee, transportation. Indirect costs, on the other hand, include uniforms, footwear, lunch, out-of-pocket/tour, donation, annual festival, sport.

Transportation was the single largest item of direct expenditures in rural and urban areas. In urban areas, around 66 per cent of total household costs were for transportation. This suggests that there was a problem of location of elementary schools. The distant location of the schools and large transportation costs may act as the major deterrent for parents to send children to elementary schools.

Uniforms also claimed a substantial share (more than 50 per cent) of total expenditure. The excessive expenditure for uniforms is a question that deserves special attention from educators and policy-makers.

In relation to total household expenditures, education expenditures, both direct and indirect, account for approximately 4.5 per cent of total household income. However, expenditure on education varied according to level of household income. According to the survey results, the propensity to spend on elementary education seems to be a positive function of household income. Particularly, richer households spend more on girls' education than poorer households do.

Household costs varied according to the birth order of the children. The direct and indirect expenditures for elementary (Classes 1–8) education for children in the 6–14 age group was the highest for the first-born children in the household. In other words, the oldest children tend to cause higher household costs as compared to younger children. In the case of the rural areas, expenditure on the oldest child was more than one and a half times the expenditure on the youngest child. In urban areas, the cost was nearly double for the oldest child. Within the state overall, costs for the oldest child were 1.8 times the costs for the youngest child.

The analysis of household costs according to caste category shows that in certain districts, including Rewa, Mandla and Bilaspur, the household expenditures were higher for SCs than for STs. However, overall household expenditure for elementary education was highest among advanced communities. This may be due to their increased ability to pay given their higher socio-economic level. It is also worth noting that the cost differential according to the communities is larger in the case of urban areas than in the case of rural areas. This might reflect the smaller opportunities in rural areas for the advanced communities to spend on elementary education.

Household costs varied according to the management type of school (according to management) children were attending.

Household costs for the private unaided schools were substantially higher than costs for government and private aided schools. The lowest household expenditure level was found among the government schools. Even considering the components of direct and indirect expenditures, household costs for elementary education in government schools were, by and large, lower for both advanced and backward communities than in the other types of schools. A surprising point to be noted is that the government schools also charge fees and these fees are high even for the backward communities. They account for around 15 to 16 per cent of the direct (backward) household cost for all types of elementary education schools. Examination fees are also fairly high in the government schools for children of backward communities (even higher than the fees charged in the private aided schools and for all types of elementary education schools). In general, household costs were generally higher for girls than for boys at all stages of elementary schools, irrespective of the nature of the school.

In order to offset these out-of-pocket costs borne by parents, most state governments provide incentives to bring the children to school, and to keep them there. Under the sponsorship of the state government and community participation, a number of incentives are provided. These incentives consist of assistance for books and stationery, midday meals (which are funded by the central government), scholarships, attendance money and so on. These incentives play a crucial role in promoting elementary education, particularly of socially and economically backward communities. Thus, a well-designed policy to identify such needy children and provide them with incentives might be quite effective. The general practice of a blanket provision of incentives for all children irrespective of their social and economic background may prove to be not only costly to the government, but also disadvantageous for achieving UEE.

From the field survey, it was found that about 13 out of every 100 children have been receiving one or the other type of incentives in the state. The percentage of children receiving incentives was higher for rural areas (20 per cent) than for urban areas (7.3 per cent). One should not overlook the need for such incentives in urban areas as well, particularly for the socio-economically backward communities, slum dwellers, daily wage earners and so on.

As expected, the incidence of incentives for SCs, STs and OBCs was much larger (18 to 26 per cent) than in the case for others (12 per cent) in rural areas. In urban areas, for the less developed communities, the incidence of incentives is 7 to 9 per cent, while for advanced communities it is about 6 per cent. By and large, the incentives seem to be properly distributed among children considering social background, household income, parents' education and occupational status of the household.

4. PERCEPTIONS ABOUT ELEMENTARY EDUCATION

Qualitative information regarding perceptions of elementary education was gathered through the FGDs. The topics discussed included: availability of schools, conditions of school buildings, quality of teachers and the impact of government initiatives.

The general perception about school facilities, both primary and upper primary, is that they were in very poor condition. According to the villagers, most of the government schools were in dilapidated buildings, with improper ventilation and light and were not well equipped for the different seasons. The irregularity in the functioning of the schools and teachers is attributed to waterlogging during the rainy season and the unbearable heat during the summer. Moreover, the villagers reported that the school, whether a government-run primary or upper primary school, or the community-run EGS, remained closed for some months during the rainy season due to waterlogging.

Another main complaint was the limited access to schools. Even when there were schools within the habitation, children faced various difficulties such as crossing the main road or crossing a railway line, which results in a high risk of accidents. In addition, the villagers were not happy that the schooling facilities for upper primary education were not available in the same habitation, for which reasons they had to withdraw their young daughters, particularly, from the schools before completing the elementary stage. An upper primary school located 7–8 km. away from the village would not serve their purpose.

Another concern was that 99 per cent of the schools and EGS centres did not have drinking water facilities or toilet facilities. If toilet facilities did exist, the conditions were unhygienic. Separate

toilets for boys and girls did not exist. Thus, irregular attendance of children and dropouts could be attributed to this information.

The majority of complaints were about the lack of teacher commitment. Important members of the villages and parents in a majority of villages reported that the poor atmosphere in the primary schools was due largely to the disappointing educational culture in the village and the lack of trust in teachers.¹⁶ Villagers reported children being beaten in school, as well as poor teacher conduct in front of children. Another main complaint was the menace of private tuition classes. The teacher in the government and EGS schools were reported to be inducing children to join their own private tuition classes rather than helping them during school hours.

In most of the villages, the Village Education Committee (VEC) was almost non-existent and wherever it was constituted, it did not function effectively. From this point of view, there was no oversight for planning or monitoring the progress of elementary education in the village. Wherever there was a committee, the vested interests of powerful Thakurs or upper caste members won out.

Finally, villagers were not satisfied with the various promotional schemes for UEE, including the meal programmes. They also mentioned various shortcomings, such as the lack of transparency in the administration and limited coverage for needy children.

5. PUBLIC EXPENDITURE ON ELEMENTARY EDUCATION

There have been continuously rising expenditures on elementary education. The percentage of State Domestic Product (SDP) allocated to elementary education increased from 0.7 per cent in 1960–61 to 2.3 per cent in 1997–98. However, this share is still at the lower end of the range for the states under examination here—from a low of 1.05 per cent in West Bengal (WB) to 3.66 per cent of net SDP over 1995–2000 (Srivastava, 2005).

The Government of MP devoted increasingly larger amounts to elementary education from its total education budget. During the mid 1960s, 45 per cent of total education budget went to elementary education, which increased to 62 per cent during the mid 1990s. This increase was facilitated by the considerable funds transferred to MP by the central government funded District Programme for Elementary Education (DPEP), under which MP was one of the largest beneficiary states.

In the same way, the annual expenditure per pupil on elementary education between 1980 and 1996 shows an upward trend. It increased from Rs 134 to Rs 231 (at 1980–81 prices). Nonetheless, the average annual growth rate of per pupil expenditure has not shown an encouraging trend particularly after 1990–91. While during 1980–86, per pupil expenditure increased at the annual rate of 4.6 per cent and at 6.6 per cent from 1985–86 to 1990, it increased at the rate of only 0.9 per cent during 1991 and 1996. Almost all states studied in this book experienced a slower growth rate in education expenditures after the structural adjustment programme was initiated in the early 1990s.

MP's per capita expenditure on elementary education is still much lower than most states, particularly the developed states of Maharashtra and Kerala (Table 5.11). In 1980, UP and MP had the lowest expenditure per capita on elementary education; it was still so in 1998. Expenditure on elementary education for MP was Rs 76.47 compared to Rs 265.18 in Kerala, in 1980. Despite the important increase in expenditure (approximately 77 per cent between 1980 and 1998), the level is comparably low.

Table 5.11
Per Capita Expenditure on Elementary Education
at Constant Prices (1981–82) (Rs)

<i>State</i>	<i>1980–81</i>	<i>1990–91</i>	<i>1997–98</i>
AP	99	230	–
Bihar	103	288	–
Gujarat	155	367	523
Kerala	265	453	–
Maharashtra	153	292	–
MP	76	248	338
Orissa	87	242	361
Rajasthan	108	275	360
UP	74	254	–

Source: Government of Madhya Pradesh (various years).

Notes: 1. For calculating per capita expenditures, the population in age group 6–13 was taken as the denominator from 1980 to 1989–90 and 1981 Census figures were used. For the subsequent years, the 1991 Census figures were used if mid year population figures are not available.
2. Figures are converted to constant prices by taking index number of wholesale prices.

Variations over time show that expenditure on elementary education is vulnerable to changes in the Indian and MP economy. From 1980 to 1991 (pre-reform period), the total expenditure on elementary education per capita at constant prices increased nearly 3.2 times, whereas between 1991 and 1998 it increased just 1.4 times (reform period). The reform period thus had adverse effects on the revenue account for elementary education spending. However it should be mentioned that plan expenditures increased quite significantly as compared to non-plan expenditures during the reform period. But since the plan expenditures have only a small share in total expenditures (about 11 to 25 per cent), a significant increase in this share may not have marked effects on the development of elementary education.

6. GOVERNMENT INITIATIVES FOR UEE

Overview

After the adoption of the National Educational Policy in 1986 there has been a resurgence in national programmes adopted by all the states and union territories. In MP, the schemes for achieving UEE included Operation Blackboard (OB). The OB initiative was introduced in the state in 1987 with the aim of improving the physical facilities and teaching facilities in primary and upper primary schools. So far this initiative has benefited 19,574 primary schools.

The DPEP, introduced in 1994, focused on improving physical facilities for flexible but rigorous elementary schooling at affordable cost. MP was one of the largest and earliest beneficiaries of the central government (donor-funded) programme. DPEP was introduced in 33 districts of the state (all low-literacy districts)—or well over half of the undivided state; this was a larger coverage by DPEP than in any other state. DPEP's concern for decentralised action in primary education was consistent with the state government's policy.

However, these are all national programmes. MP has benefited from a series of initiatives founded on decentralised governance of elementary education (and also other basic services) that are

specific to the state, and taken at the initiative of the state government. While the focus on decentralised governance has been on improving access of primary education, incrementally the state government has moved to incorporate other aspects of basic services. MP was unique in introducing an Education Guarantee Scheme (EGS) in 1997, which has proved so successful that the central government decided to make it into a national programme, as part of the Sarva Shiksha Abhiyan. We now examine a series of these initiatives that have impacted favourably on schooling.

Decentralised Governance: Lok Sampark Abhiyaan

Lok Sampark Abhiyaan (LSA) was the state government initiative in 1996 to undertake micro-planning on a habitation basis to assess how many and which children were out of school, as well as to find out the status of school infrastructure. It was a participatory survey involving the school teachers in every school as well as members of the community—both a survey as well as a mass mobilisation. LSA 1 covered over 55,000 villages and contacted 6.1 million households. It showed that only 70 per cent of the habitations had access to primary schools. It also showed that most children reported as dropouts were never enrolled. Most of the children out of school were girls and children of scheduled tribes.

Yet another LSA was carried out in 2001, this time focusing on middle school gaps, which measured progress at primary level and established benchmarks for the upper primary level. It made possible a UEE plan with district-specific perspective plans to achieve UEE.

The existing norms were for providing a primary school within 1 km and an upper primary school within 3 km. What LSA demonstrated was that most of the habitations that did not have a school by this norm were inhabited by SCs and STs.

Decentralised Governance: The Educational Guarantee Scheme (EGS)

Having discovered in the course of LSA 1 that thousands of habitations lacked a school, the MP government introduced EGS on

1 January 1997. This scheme emerged from the need, political will and commitment of the state bureaucracy and leadership to achieve UEE in a reasonable period of time. It also reflected the clear recognition of the constitutional right of all children (under age 14) irrespective of caste, creed and gender to elementary education.

Under the scheme, whenever there is no school within a tribal area with 25 children (40 for non-tribal areas) and there is no school within 1 km., the government guarantees to provide a trained teacher known as *guruji* within ninety days. The community provides the physical space for learning and also proposes the *guruji*'s name. The teacher must belong to that village.

The EGS centres are a low-cost alternative to a regular school, thanks to the support and contributions by local communities. Most of the cost towards space, furniture and equipment are borne by the community. The government gives a small sum towards the honorarium of the *gurujis* in EGS centres, over and above other expenses. It was estimated that each EGS centre cost Rs 8,500 per annum as per estimates in 1998–99. The official reports as well as the field survey results show that the EGS centres have been functioning much more effectively than even government schools. The EGS centres in MP are generally considered a success in terms of enrolment of children, enthusiasm and commitment of teachers, retention of children and their successful completion of the course in the centre.

The enthusiasm has been so high in MP that within one year of launching, more than 40 primary schools came into existence each day of the year in the state through EGS. While the formal system provided 80,000 primary schools in 50 years at the rate of 1,600 schools per year, the Rajiv Gandhi Prathamik Shiksha Mission (RGPSM) provided 30,274 primary schools in just four years from 1994 to 1998 at the rate of 7,568 primary schools per year.

EGS was considered to be a cost-effective strategy with unit costs of Rs 8,500 per EGS centre per year. Households are not required to spend anything towards primary education. The cost of books (Rs 25 per child) was also included in the unit cost of Rs 8,500 and the administrative expenditure was low at Rs 40 per year. These unit costs were determined jointly by government officials and the local communities. This is extremely low compared to the unit

costs of primary schools at Rs 177,000 towards capital cost per school and Rs 1,573 per child annually for recurring material and non-material cost. The guruji's salary (Rs 500 per month for ten months) and cost of the school space are just 10 per cent of the cost of a regular teacher in a formal school.

As of 1999–2000, there were 86,858 regular primary schools, 26,000 EGS centres, 5,056 alternative schools, 21,108 middle (upper primary) schools and 29,536 non-formal education centres in the state. An evaluation suggested that the attendance in EGS schools is about 80 per cent higher than in formal schools. Children in the EGS schools seem to learn faster and better. In many instances, children have completed the required competencies for the grade in a much shorter time span than normal primary school students. A combined package of teacher training, language improvement schemes for both teachers and children, quality watch initiative, academic monitoring, involvement of the district academic resource group in teacher development programme, community participation in planning, and monitoring and assessment of the progress achieved and the problems faced seem to have heightened the enthusiasm for EGS.

However, our field investigation highlighted important weaknesses in the EGS scheme:

- According to our field investigators, a third neutral party or a non-governmental mechanism is required to conduct frequent monitoring and evaluation arrangements. There were many cases where the EGS did not exist.
- Special attention must be given to the payment of the gurujis. Discontent due to inadequate payment, considered to be 10 per cent of the payment received by regular teachers in formal schools, has resulted in unionisation. This has negatively impacted productivity and weakened the commitment of EGS teachers.
- It is advisable to be pragmatic in considering the unit cost of different components involved in the educational process. The Rs 40 per school per year for administration of the EGS is an unrealistic estimate. This is a small amount even for running a school for ten children for just a month.

- The state government has not had a policy of pre-service training as a prerequisite for teacher recruitment. Hence many teachers, especially shiksha karmis and gurujis have not received training. This underlines the need for a perspective plan for training of all teachers hired under these new schemes.

There is no question that improved training for these teachers will remain an issue. MP has responded well to the needs. DPEP has enabled the construction of 236 block resource centres (or teacher training centres) to make teacher training possible at sub-district level. Academic support is also being decentralized. Thus, 4,325 cluster resource centres (Jan Shiksha Kendra) have been located in primary or middle schools to serve 10–15 schools. A senior teacher is its coordinator, and is expected to visit the schools to monitor teaching. This has made possible the regular supervision of schools, reducing the ratio of supervisors to schools from 1:80 to 1:20 (MP Human Development Report, 2002).

There has been a remarkable increase in the numbers of teachers trained in the 1990s, from an average of 473 to 2,731 per district per year from 1994 to 2001. In the state as whole, an average of 100,000 teachers have been trained every year since 1995, including some by the distance learning mode.

Decentralised Governance: VECs and PTAs

Recruitment and transfer of teachers, construction of school buildings and procurement of school equipment have become a responsibility of the panchayats. VECs have been required to be created by law (under an amendment of the Gram Swaraj Act), and they are required to supervise local schools. Another law (Jan Shiksha Adhinyam, passed in 2002) mandates the creation of a Parent-Teacher Association (PTA) in every school, giving it legal status. The rights of the PTA include recommending the withholding of the salary of a teacher in case of wilful default of duty. Apparently, over 100,000 PTAs have been constituted. However, as Kremer et al. (2004) note, only an active PTA can make a difference to the teacher absence rate and help improve school performance; its

mere existence is not effective. This is confirmed by the MP Human Development Report (2002); the paradox is that good schools with motivated teachers have more involved PTAs, while the less functional schools have weaker PTAs.

Decentralised Governance: Literacy and Padhna-Badhna Sangha

We noted at the beginning of this chapter that MP's literacy rate increased by 20 percentage points between Census 1991 and 2001. The primary education base supported action to improve adult literacy. But MP took an innovative approach to adult literacy in the state. In 2000, a *padhna-badhna andolan* (or a mass mobilisation for literacy) was initiated as a follow-up to the erstwhile Total Literacy Campaign (a central government effort of the early 1990s). In this new programme in MP, people who were non-literate came together in a group (or *samiti*) and engaged any literate person to be their teacher in a year-long campaign. The government provided the teaching-learning material and set up an evaluation system. If a person passed the literacy exam at the end of the year, the voluntary teacher would receive an honorarium of Rs 100 per person made literate. Over 200,000 such groups came into existence, and within one year 3 million people were made literate. The programme is continuing. The incentive led to the mass mobilisation of educated unemployed youth—and the outcomes were very different from the central government's erstwhile Total Literacy Campaign (MP HDR, 2002). The increase in literacy is bound to impact favourably on the effort to promote schooling, since research evidence suggests that the children of literate parents are more likely to perform better at school than first generation learners.

7. MAJOR POLICY CONCLUSIONS

MP has made remarkable progress in primary education in the 1990s, and is well on its way to ensuring universal access to upper primary education. As a result of the success of EGS universal access to primary schooling was ensured by the end of the last decade. LSA 2 identified the gaps in availability of upper primary schools (of about 7,575 schools in 2000). Hence, the same number of schools

were being upgraded to upper primary level. This will ensure universal access to upper primary, so that each primary school has an upper primary school within 3 km.

Whenever there is a massive increase in enrolment there is always a risk of the pupil–teacher ratio increasing sharply, with a dramatic fall in quality. MP has prevented that from happening, despite its severe fiscal constraints. A number of decisions have been taken about teachers, which have prevented student–teacher ratios from increasing. The appointment of relatively highly paid regular teachers on a permanent basis on a government pay scale has been ended. All teachers are now appointed on a contractual basis. Teachers are employed by panchayats on a fixed contract at a lower salary scale, a corollary to the system of decentralised governance the state has adopted for basic services. The eligibility criteria in terms of minimum educational qualifications are the same as before. In addition to the teachers who are already part of the permanent civil service (with a minimum salary of Rs 6,000 per month), now there are three main types of teachers: the traditional teacher assistant; shiksha karmis; and gurujis for EGS schools. The latter two are appointed to particular schools and are not transferable, which is the biggest difference with the older lot of teachers on permanent appointments on a government salary scale who were transferable. EGS teachers are chosen by the community and are accountable to the local community. The shiksha karmis, on the other hand, are accountable to block- and district-level panchayat bodies.

Apparently, according to the MP Human Development Report 2002, this new recruitment policy has encouraged a larger number of women and persons from socially-disadvantaged groups (SCs, STs, OBCs) to be recruited. Given that socially-disadvantaged children experience have traditionally experienced discrimination in school in the Hindi-belt (see, for example, the chapters on Bihar, UP and Rajasthan in this book), and given the small share of female teachers in MP as we noted earlier in this chapter, the policy change in respect of teachers is truly significant. It may partly account for the lower phenomenon of teacher absence in MP compared to other states found in a 2004 survey covering 20 Indian states (Kremer et al., 2004). The HDR cites three reasons for this remarkable growth in female and socially-disadvantaged teacher recruitment:

one, local recruitment meant better dissemination of information and awareness; two, recruitment against school and hence non-transferability of services; and three, broader-based character of panchayats as recruitment agents and hence a greater sensitivity to caste and gender issues. One should note that the high-achiever states of South-East Asia (for example, Indonesia, Thailand) have always adopted a policy of local recruitment of teachers, rather than appointing them to the civil service on transferable posts (Mehrotra and Jolly, 2000).¹⁷

The second profound change of all-India significance that MP has brought about is the remarkable degree of decentralised governance. The *Lok Sampark Abhiyaans*, the Education Guarantee Scheme, the *padhna-badhna sanghas* for literacy promotion, the emphasis on activating VECs and PTAs—these are all concrete evidence of the approach of the government. These are dramatic developments in what remains one of the relatively poorer states of the country. It is not suggested that these developments have already led to sharp improvements in school quality—if they had, it is doubtful if the focus group discussions we cited earlier (see section on parents' perceptions of schools) would be so critical of government schools. However, there is little doubt that in what just a decade ago was one of the most educationally backward parts of the entire country, there is strong evidence of change—demonstrated both in enrolments as well as literacy.

We briefly summarise below the major policy conclusions from our study of elementary education in MP:

- In view of the wide divergence of the GER and NER, particularly in rural areas and also with reference to girls, it is necessary to strengthen the enrolment drives particularly with respect to these categories. In the urban areas also, similar initiatives need to be taken and particularly directed towards scheduled tribes and scheduled castes.
- The first-born children are generally made to dropout from their primary schooling, partly on account of their responsibility towards their younger brothers and sisters. The opportunity cost of elementary education is fairly high, for which reason the dropout and never-enrolled rates were high.

From the parents' point of view, monetary incentives are necessary for persuading them to send their children to school and ensure a complete education. These two findings together seem to suggest that the policy makers might consider replacing the current system of multiple incentives by a single monetary incentive system. Many complaints against the present incentive system in the state only suggest the need for strict monitoring and serious implementation of the incentive system.

- Household costs of elementary education are fairly high. Some of these costs, which can be considered as avoidable costs (like uniform, shoes, etc.), are a large share of household costs. Policy-makers have to pay attention to whether such expenditures can be reduced and savings can be used for more academic items of expenditures.
- The commitment of the teachers is questionable. The policy makers should introduce a strict system of monitoring the work done by the teachers and also introduce a mechanism of rewards and penalties, which should be implemented rigorously without concessions.
- VECs are not constituted at all in many villages. It was also found that often they do not function properly wherever they are constituted. Since the VECs can act as important monitoring and oversight bodies, the government has to see to it that they are constituted and are also made to function. MP has a strongly decentralised system particularly after the 73rd and 74th Amendments to the Constitution. However, if decentralisation is to be effective, such bodies have to play a serious role. In the case of UEE, the role of VECs can hardly be overemphasised.
- In order to remove the sense of disparity among the gurujis and teachers, the policy makers might think of providing extra status certification for the former as compared to the latter. Possibly the designation of guruji rather than teacher intended to connote that extra status certification. However, some more concrete incentives in real terms might be considered for the gurujis. For example, gurujis may also be considered eligible for the food grains incentives or other incentives in lieu of

food grains. Rewards for better performance and certificates of honour for the gurujis might also be considered vis-à-vis the teachers in the formal system. Another suggestion which might receive consideration by the MP government as a long-term measure is the freezing of recruitment of teachers and recruitment of only gurujis. The implications of this long-term measure should be further examined.

- The costs for starting and running a formal school are formidable, much higher than the alternative school or the EGS centre. The policy of reaching UEE through the formal schools even by 2011 does not seem to be feasible. Hence, MP has to rely more upon the EGS approach.
- In view of weak state finances, MP must mobilise external funding for UEE. Adoption of a reformed EGS on the lines suggested above, introduction of innovative measures for resource mobilisation from within the state involving the community on a larger scale in planning, implementing and assessing the various schemes in UEE, mobilising resources in kind from the community and so on are recommended. We also suggest the introduction of an educational tax in all the *panchayats* and *zila parishads* in MP.
- Since schooling facilities are highly inadequate, serious attention on their improvement with community involvement is required. The absence of drinking water facilities and toilet facilities is one of the most important factors for the non-enrolment and dropping-out of children (girls in particular). The present scheme of OBB does not seem to be working properly, primarily due to the system of multiple financing under OBB. The funds now come from IRDP (Integrated Rural Development Programme) for the purpose of construction of school rooms, toilets and water facilities. However, this is not a priority item under IRDP. Hence, we recommend separate allocation of funds to the Department of Education itself, which should be made responsible for the provision of the facilities.

APPENDIX 5A-1

Table 5A.1
Villages Surveyed in MP

<i>Village</i>	<i>District</i>	<i>No. of house-holds (1991)</i>
Godhi	Bilaspur	185
Korbi	-do-	357
Khudiya	-do-	124
Kalmi	-do-	250
Parsadih	-do-	105
Tikait Pendri	-do-	155
Deori	-do-	281
Nawapara	-do-	113
Kodawahi	-do-	168
Piplodasagotimata	Ujjain	439
Navli	-do-	124
Kheda Madda	-do-	179
Jawasiyakumar	-do-	200
Jhirmira	-do-	103
Nipaniyabadar	-do-	136
Bhat Khedi	-do-	158
Banbana	-do-	287
Erwas	-do-	116
Chichringpur Ryt	Mandla	101
Amjhar Mal	-do-	128
Jata Dongri Mal	-do-	172
Jamgaon	-do-	132
Garaiya Pand	-do-	179
Mohari Ryt	-do-	103
Dungariya	-do-	127
Kanai Sangwa	-do-	168
Pindra	-do-	710
Ahirgaon	Rewa	160
Madari	-do-	261
Darraha	-do-	111
Puraini Kothar	-do-	104
Mahuli	-do-	150
Chaukhada	-do-	234
Maraila	-do-	235
Rehi	-do-	105
Sakarwat	-do-	150

Table 5A.2
Regression Analysis of Early Childhood Schooling and Enrolment
in Elementary Schools
 (ECCE as an explanatory variable)

<i>Dependant Variable</i>	<i>Less Developed States</i>			<i>Developed States</i>		
	<i>R Square</i>	<i>Beta</i>	<i>T value</i>	<i>R Square</i>	<i>Beta</i>	<i>T value</i>
<i>GER</i>						
Boys	0.37	0.61	1.90	0.10	-0.32	-0.88
Girls	0.51	0.72	2.50	0.20	-0.44	-1.31
Total	0.49	0.70	2.41	0.15	-0.38	-1.10
<i>NER</i>						
Boys	0.08	0.28	0.72	0.15	-0.38	-1.01
Girls	0.32	0.57	1.69	0.22	-0.47	-1.40
Total	0.19	0.44	1.19	0.18	-0.43	-1.24

Sources: EFA, 2000; Unicef, 1999.

Note: Enrolment in early childhood care and education (ECCE); less developed states: AP, MP, Bihar, Orissa, Karnataka, Rajasthan, Uttar Pradesh, West Bengal; more developed states: Goa, Gujarat, Maharashtra, Kerala, TN, Haryana, Punjab, Chandigarh, Delhi.

The results indicate interesting patterns in less developed and more developed states.

- While the R square value is very small in the case of developed states, it is reasonably high in the case of less developed states.
- The beta coefficients are positive in the case of less developed states, whereas they are negative in the case of developed states, whether we consider GER or NER as the dependent variable.
- Many of the beta coefficients are statistically significant in the case of less developed states, whereas they are not so in the case of developed states.
- R square value is higher in the case of the regression exercises where enrolment rates for girls are explained.
- The explanatory value in the case of less developed states is higher when we considered GER as the dependent variable rather than the NER.

Notes

1. Its area is roughly 13.5 per cent of the entire geographical area of India.
2. The per capita income in MP is Rs 8,114 (less than the national per capita income of Rs 9,271). In addition, MP was ranked 25th out of 32 states and union territories in 1991 on the Human Development Index.

3. Like the other Bihar states, it is Hindi-speaking.
4. The ST population in MP is 15,403,000 inhabitants. The tribal districts are now mostly part of the state of Chhatisgarh created in 2000. This chapter is about the undivided MP.
5. The gap in literacy rose from 24 per cent in 1961 to 29.29 in 1991, but declined slightly to 26.52 in 2001.
6. GER was 80 and 63 per cent in primary and upper primary levels respectively; NER was 57 and 36 per cent in primary and upper primary levels.
7. The urban dropout rate for SC children was 14 per cent compared to 4 per cent among 'others'.
8. Figures above 100 per cent show an overrepresentation occurring with the survey data.
9. Data found in same survey, although not represented in Table 5.5.
10. The dropout rate was 12 per cent among informal households, while it was slightly lower at 10 per cent for formal households. The difference in the never-enrolled rates was considerable. It was 23 per cent for informal households and only 10 per cent for formal households.
11. The analysis regrouped data according to birth order and considered four main possibilities: daily attendance, attendance on most days, occasional attendance and 'never' attendance.
12. In order to find the relation, we classified children according to educational level of the parents.
13. The early enrolment ratio in Early Childhood Care and Education (ECCE) centres was 15.6 compared to 27.6 and 21.2 in Maharashtra and Orissa. The gross enrolment (ECCE) ratio in Kerala was 17.5, and the lowest was found in Bihar at 8.1. (Department of School Education, 1997–98).
14. From the Unicef survey the sample consisted of 130 schools, of which 101 were managed by the government.
15. The school facility index was constructed by considering the following variables: nature of the building, electricity supply, toilet facility (girls' toilet), water supply and playground.
16. The responses of the villages in the FGDs about the teachers demonstrate their utter disrespect for the teachers. There was a unanimous feeling about the lack of regularity of attendance of teachers in the school, their lack of commitment to teaching and their bad treatment of school children in the class.
17. The argument here is not that all civil service appointments in India should be on temporary contracts or on a non-transferable basis.

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6

Assam: The Challenge of Financing Universal Elementary Education in a Poor State

RAGHABENDRA CHATTOPADHYAY

1. INTRODUCTION

The economy of Assam is predominantly based on agriculture. Industrially Assam is a backward state. There are no large-scale industries, and two oil refineries established by the Government of India constitute the major industries. And, of the agriculture-based industries, tea occupies an important place in the state's economy.

Social indicators are lower in Assam than in India. Only 11 per cent of the population of Assam lives in urban areas, as compared to 26 per cent in India as a whole. In 1991, the sex ratio of the population was 923 for the state and 927 for the nation—which speaks for the gender discrimination. In both Assam and all India, 36 per cent of the population is in the 0–14 age group. Persons from Scheduled Castes (SCs) comprised 7 per cent of the population of Assam as compared with 17 per cent in the whole country. However, persons from Scheduled Tribes (STs) constituted 13 per cent of the population of the state as compared with 8 per cent in the whole country (Table 6.1).

Assam shows a limited progress in literacy relative to the rest of the country between 1991 and 2001. In 1991, literacy was slightly above the average for India. According to the 1991 Census, the literacy rate for the population of age seven years and above was 53 per cent, as compared with 52 per cent in the country. The male literacy rate was 62 per cent while for women it was 43 per cent,

as compared with 64 and 39 per cent for men and women respectively at the all-India level. The 2001 Census data shows that while the all-India literacy rate has increased to 65.4 per cent, Assam has only gone up to 64.3 per cent. Assam's male literacy rate moved up to 72 per cent and the female literacy rate to 56 per cent in 2001. The rate of male literacy in India is 76 per cent, while female literacy is 54 per cent. Thus while the Assam female literacy rates show a very substantial increase (13 percentage point jump) and is above the country average, the male literacy rate has increased only by 10 percentage points.

Table 6.1
Trends in Basic Demographic Indicators

<i>Index</i>	1971	1981	1991	2001
Population	14,625,152	18,041,248	22,414,322	26,638,407
Density	150	230	286	339
Per cent urban	8.8	9.9	11.1	12.7
Sex Ratio	896	910	923	932
Per Cent 0–14 years old	47.9	N.A.	36.1	N.A.
Per Cent 65+ years old	2.9	N.A.	2.4	N.A.
Per Cent Scheduled Caste	6.1	N.A.	7.4	N.A.
Per Cent Scheduled Tribe	12.8	N.A.	12.8	N.A.
Per Cent Literate				
Male	36.7	N.A.	61.9	71.9
Female	18.6	N.A.	43.0	56.0
Total	46.0	N.A.	52.9	64.3

Source: Registrar General of India, Government of India. www.censusindia.net.

This chapter, based primarily on the Unicef survey (1999) in Assam, is organised as follows: Section 1 presents an overview of enrolment, dropout and out-of-school children, and trends in locational and gender equity in these variables. Section 2 is devoted to examining enrolment and quality issues in elementary education by type of school, that is by management-type (government, private aided and private unaided). This evaluation of the school delivery system is followed by an analysis of the public expenditure pattern on education in Section 3. Section 4 goes on to discuss household expenditure on schooling as a determinant of demand

for schooling. Section 5 examines some reforms put in place, and the final section concludes with some policy implications.

2. PRIMARY AND MIDDLE SCHOOLS IN ASSAM

This section introduces the achievements and failures of elementary education in Assam and identifies the main problems in universalising it. In this section, our objective is to present a historical analysis based on certain benchmark years before 1985 and for each year in the 1985–1993 period. By analysing both the supply-side and demand-side factors for poor enrolment and high dropout rate, the main questions regarding accessibility, retention and quality of elementary education have been discussed, along with gross and net enrolment ratios, gender differentiation, rural–urban differences and caste differentials. The question of access, proportion of villages without schools, ratio of primary to middle schools, employment and conditions of para-teachers, and Minimum Levels of Learning (MLL) have also been discussed. However, we should point out that the reliability of official data varies very sharply when we move from Classes 1–4 to Class 5. The reason behind this is that most of the primary schools in Assam provide education only up to Class 4, although in the rest of the country the primary level constitutes the first five classes. Thus in most cases, once children graduate from Class 4, they have to seek admission elsewhere. In most instances, the higher-level schools (middle school and above)¹ are quite far away from the children's residence. This is often a hindrance, particularly for the girl child's education.²

Trend—Equity and Gender

The enrolment status of children in the primary age group is quite encouraging and appears to be increasing over time. As per the 1999–2000 Unicef survey, 81 per cent of rural boys and 98 per cent of urban boys in the age group 6–13 years, were enrolled in primary/upper primary schools. However, enrolment is less for girls at 79 and 97 per cent for rural and urban areas respectively.

Overall percentage of dropout is 10 per cent in rural and 1 per cent in urban areas. Overall, never-enrolled rate is about 8 per cent in rural areas while negligible (0.02 per cent) in urban areas.

There is a big difference in government school enrolment in rural (96 per cent) and urban (58 per cent) areas in Assam; that is most children are in government schools. The reverse is true for private schools (aided and unaided)—they account for 42 per cent of enrolment in towns and 4 per cent in villages. As we will see later, government schools fare quite badly compared to private schools. Most of the private schools have come up in the urban areas and it is here that we find a large proportion of children joining private schools. This may actually have policy implications.

The Net Enrolment Ratio (NER) of rural children is 47 per cent in primary, 20 per cent in upper primary and 39 per cent in overall elementary stages. It is lowest (10 per cent) among ST girls and ST boys (14 per cent) at upper primary stage. For urban children the ratios are higher at 69 per cent for primary, 33 per cent for upper primary and 56 per cent for elementary stages. The lowest NER is among ST girls at upper primary stage. But, both in rural and urban areas, almost in all the stages and among all castes, the NER is lower among girls as compared to boys.

Access to Primary School

Assam has witnessed a very rapid growth of the primary school system since independence. The number of schools has increased threefold, the number of teachers has gone up more than four times and enrolment has increased by more than five times between 1948–49 and 1991–92. At present most of the schools (over 93 per cent) are within 2 km from any individual household and more than 57 per cent of the schools are within a 1 km radius. Yet these numbers do not reflect the conditions of the schools as poor infrastructural conditions prevail in most of the schools. As per the Directorate of Elementary Education, Assam there are about 30,000 primary schools with about 70,000 teachers and a total enrolment 2.97 million in the primary schools during 1991–92. There is no accurate information available regarding the type of

buildings in which these schools are located, the number of classrooms available, and the number and the composition of teachers in terms of trained and untrained teaching. In fact the Government of Assam is undertaking school-mapping regarding these particulars and other essential information.

Enrolment

Tables 6.2a and 6.2b indicate that Gross Enrolment Ratios (GERs) are greater for urban areas as compared to rural areas. However, in the rural areas the GER among girls is lower than in urban areas. Similarly, although the GER is higher in urban areas as compared to rural at primary and upper primary levels, it should be noted that there is a decline from primary to upper primary level. In rural areas, GER for ST girls in the age group of 11–13 is the lowest at 40 as compared to the same for boys which is 57. But in urban areas, there is very low variation in GER, both genderwise as well as classwise.

Table 6.2a
Gross Enrolment Ratio (Rural)

<i>Gender & Caste Group</i>		<i>Class (1–5) Age (6–10) (%)</i>	<i>Class (6–8) Age (11–13) (%)</i>	<i>Class (1–8) Age (6–13) (%)</i>
Boys	SC	104.66	75.41	95.92
	ST	98.52	57.50	87.77
	OBC	96.04	85.61	92.80
	Others	108.13	65.81	94.52
	Total	104.47	70.01	93.74
Girls	SC	96.67	65.45	86.86
	ST	99.26	40.00	80.51
	OBC	87.20	79.22	84.94
	Others	98.99	67.75	89.16
	Total	96.33	66.82	87.23
Total	SC	101.01	70.69	91.73
	ST	98.85	48.57	84.41
	OBC	98.85	82.75	89.10
	Others	103.95	66.69	92.08
	Total	100.72	68.55	90.75

Source: Unicef Survey, 1999–2000.

Table 6.2b
Gross Enrolment Ratio (Urban)

<i>Gender & Caste Group</i>		<i>Class (1–5) Age (6–10) (%)</i>	<i>Class (6–8) Age (11–13) (%)</i>	<i>Class (1–8) Age (6–13) (%)</i>
Boys	SC	135.71	88.55	119.58
	ST	122.57	100.01	116.00
	OBC	136.32	101.49	123.04
	Others	135.29	98.37	121.29
	Total	134.01	98.19	120.89
Girls	SC	137.63	95.38	120.68
	ST	135.84	92.00	119.78
	OBC	133.50	93.07	119.87
	Others	131.51	106.70	122.43
	Total	133.25	100.87	121.27
Total	SC	136.55	91.95	120.08
	ST	128.32	96.48	177.73
	OBC	134.97	98.99	121.55
	Others	133.51	102.17	121.85
	Total	133.66	99.44	121.07

Source: Unicef Survey, 1999–2000.

Net Enrolment Ratios (NER)

The NER tables (Table 6.3a and 6.3b) indicate that the NER is consistently higher in urban areas as compared to rural regions at primary and upper primary stages. In almost all castes the NER is lower among girls as compared to boys. NER is lowest among ST girls in the upper primary stage but at the primary stage, the NER for boys and girls is almost the same.

Dropout

The Unicef survey revealed that in the 6–13 age group, financial constraints are the principal reason for both never enrolling and dropping out (Table 6.4). Because of financial constraints, 45 per cent of the never-enrolled and 28 per cent of the dropouts remain outside the school education system. Because of engagement in economic activities, 10 per cent of never-enrolled and 11 per cent

Table 6.3a
Net Enrolment Ratio (Rural)

<i>Gender & Caste Group</i>		<i>Class (1–5) Age (6–10) (%)</i>	<i>Class (6–8) Age (11–13) (%)</i>	<i>Class (1–8) Age (6–13) (%)</i>
Boys	SC	49.42	18.03	40.03
	ST	37.52	14.17	31.44
	OBC	42.88	21.40	36.21
	Others	52.68	20.02	42.17
	Total	48.92	19.58	39.79
Girls	SC	44.44	17.58	36.00
	ST	44.44	9.60	33.42
	OBC	40.78	22.51	35.62
	Others	46.21	23.67	39.12
	Total	44.73	21.32	37.50
Total	SC	47.15	17.82	38.17
	ST	40.63	11.84	32.36
	OBC	41.87	21.90	35.93
	Others	49.71	21.66	40.78
	Total	46.99	20.38	38.74

Source: Unicef Survey, 1999–2000.

Table 6.3b
Net Enrolment Ratio (Urban)

<i>Gender & Caste Group</i>		<i>Class (1–5) Age (6–10) (%)</i>	<i>Class (6–8) Age (11–13) (%)</i>	<i>Class (1–8) Age (6–13) (%)</i>
Boys	SC	70.64	41.22	60.31
	ST	64.60	24.24	52.31
	OBC	71.95	35.82	58.18
	Others	71.02	33.51	56.80
	Total	70.34	34.19	57.10
Girls	SC	62.37	36.15	51.85
	ST	61.85	24.00	47.99
	OBC	67.00	31.00	53.90
	Others	69.49	33.26	56.24
	Total	67.13	32.10	54.17
Total	SC	66.82	38.70	56.44
	ST	63.41	24.12	50.33
	OBC	69.58	33.60	56.16
	Others	70.30	33.40	56.54
	Total	68.85	33.22	55.74

Source: Unicef Survey, 1999–2000.

of dropout children are out of school. About 5 per cent and 6 per cent of never-enrolled and dropout children worked for wages respectively. The disinterest of children and parents together account for 14 per cent of never-enrolled and 16 per cent of dropout cases.

The main groups that stated financial constraint was the reason for 'never enrolling' are SCs, STs, illiterate parents, parents with annual income below Rs 12,000, and children whose parents are engaged as agricultural labourer, picking forest products or catching fish. Participation in economic activities is biased, with 67 and 50 per cent of SC and ST boys respectively, engaged in them. Again, as high as 67 per cent of SC boys, 50 per cent of ST boys and 40 per cent of girls belong to families with income below Rs 6,000 per annum. About 90 per cent of girls of illiterate parents engaged in household work, agricultural labour, picking forest products or fishing are prone to dropping out. About 33 per cent of children in families with income below Rs 6,000 per annum dropped out as they were engaged as wage labour.

Table 6.4
Factors Affecting Non-enrolment and Dropout (%)

<i>Reasons</i>	<i>Multiple Choice</i>		<i>Standardised</i>	
	<i>Never Enrolled (%)</i>	<i>Dropout (%)</i>	<i>Never Enrolled (%)</i>	<i>Dropout (%)</i>
Financial Constraints	85.86	75.97	44.55	28.40
Participation in				
Economic Activities	18.42	30.23	9.55	11.30
Child Work for Wages	10.53	14.73	5.45	5.51
Attend Domestic Chore	26.32	35.66	13.64	13.33
Look after Young Sibling	14.91	16.28	7.73	6.09
Parents Not Interested	17.54	6.98	9.09	2.61
Child Not Interested	9.65	34.88	5.00	13.04
Child's Inability in Studies	0.00	34.88	0.00	13.04
Others	9.64	17.85	5.00	6.67
Total	192.98	267.46	100.00	100.00

Source: Unicef Survey, 1999–2000.

Never Enrolled

In summary, for Assam, the NSSO, the All India Education Survey and the state statistical records estimate a 65 per cent dropout rate at the primary level with more than 50 per cent dropout at Class 1

itself. But the problem one faces here is to accept the astoundingly high 50 per cent or more dropout rate after Class 1 itself. We found that the actual dropout may be much lower than what has been estimated so far. Conversely, if this is true, the actual enrolment, particularly in Class 1 may be much lower than what is claimed by the schools. We have analysed the reasons for non-enrolment and dropout on the basis of the household data and found our results similar to NSSO findings in many respect. 'Not interested in studies', 'participation in household economic activity' and 'other economic reasons' were found to be the main reasons for dropout and non-enrolment. Thus, while the first reason given—'not interested'—may have some direct relation to the quality of the delivery system, economic causes remain the main concern.

3. PRIVATE SECTOR IN ELEMENTARY EDUCATION

This section compares the private and public sector. It also discusses the political economy of the conversion of unaided schools to aided schools by providing funds on the basis of their performance or any criterion as recommended. It also examines aspects of quality of the delivery system. This includes the facilities in schools, number of one- and two-teacher schools, ratio, distance of schools, teachers' training, and use of materials and text books in primary, upper primary and elementary schools in Assam.³

Enrolment by Type of School

Most schools (81.82 per cent) in Assam are provincialised (or managed and financed by the state government). And 14.14 per cent are venture schools—or what elsewhere are called private-aided schools (the terms relate to the process of institution building in elementary education in Assam, Table 6.5). The primary/elementary schools arose in Assam through private/community initiative. An individual or a group sets up a school first. These are called venture schools. After the school is set up and starts functioning for some time, the department of elementary education may consider recognising the school after inspection. Once the venture school meets the required criteria and the government decides to recognise the school, the financial and administrative responsibility of running the school is taken over by the government through

the District Elementary Education Office. At this stage the schools are supposed to have been provincialised. The proportion of private schools including missionary ones is only 4.04 per cent. Table 6.6 provides the percentage of children enrolled in various types of institutions in the age group of 6–13 years.

The private aided schools seem very much like an urban phenomenon; there are hardly any children enrolled in such schools in rural areas. In urban areas, less than three-fifths of the children are enrolled in government schools; in rural areas, nearly all of them are in such schools. It is interesting that, if you compare Tables 6.5 and 6.6, the proportion of children enrolled in private unaided schools is actually much less (almost negligible) than the number of non-governmental schools (venture schools, Christian missionary and other private).

Table 6.5
Per cent Distribution of Schools by Type of Management

<i>Type of School</i>	<i>Rural (%)</i>	<i>Urban (%)</i>	<i>Total (%)</i>
Government	81.50	84.00	81.82
Venture	15.61	4.00	14.14
Christian Missionary	0.58	4.00	1.01
Other Private	2.31	8.00	3.03
Total	100.00	100.00	100.00

Source: The Status of Primary Education in Assam, T 6.2a

Table 6.6
Students Enrolled by Type of Institution (6–13 yrs)

<i>Type of Institution</i>	<i>Rural (%)</i>	<i>Urban (%)</i>
Government	96.17	57.78
Private Aided	2.12	41.33
Private Unaided	1.70	0.90
Local Body/ZP/GP	0.00	0.00

Source: Unicef Survey, 1999–2000.

Note: ZP–zilla parishad; GP–gram panchayat

Facilities in Schools

The primary school buildings in rural areas are mostly semi-pucca and pucca while only 18 per cent are *kutch*a and 3 per cent are in open space. *Kutch*a buildings are found mostly in government-run and unaided schools and their share drops from primary to

elementary stage. All the private unaided upper primary schools and elementary schools are pucca. Among all the rural schools taken together, 40 per cent are pucca, 38 per cent semi-pucca, 19 per cent kutchra and 2 per cent in open space. In urban areas, pucca buildings predominate (70 per cent of government schools, 100 per cent of aided and 67 per cent of unaided schools are in pucca buildings and there is no open-air school). Among the state-run rural primary schools 81 per cent have only one usable class room while one half of the private aided schools have more than three usable class rooms each. The shortage of classrooms is acute in state-run primary and elementary schools but not so in private schools. In 97 per cent of urban schools each has more than three usable classrooms. No urban schools use their verandah as a classroom. Only two rural schools do.

The provision of drinking water in rural areas is almost nil in 22 per cent government run primary, 14 per cent upper primary and 50 per cent elementary schools. In 5 per cent of state-run primary schools the only source of drinking water is ordinary open well. On the contrary, all the private schools both in rural and urban areas have provision of drinking water.

Toilets and urinals are a common problem in all types of schools—both rural and urban. More of the private unaided schools have them than is the case for government schools.

Number of One-teacher and Two-teacher Schools

The proportion of one-teacher schools in rural areas is about 6 per cent of all schools combined, and it is 7.5 per cent among rural primary schools (Table 6.7). But in our sample schools, there were no one-teacher schools in urban areas. The proportion of two-teacher schools is about 31 per cent in rural areas but only about 1 per cent in urban areas. In other words, Assam seems plagued with a situation where nearly half of all schools in rural areas have to survive with one or two teachers supposedly teaching five classes of primary pupils.

While the urban schools have an average of more than three teachers in all types of schools, government run rural schools are plagued by shortage of teachers. About 8 per cent of government-run rural schools have one teacher and nearly 43 per cent of rural

Table 6.7
Percentage of Schools by Teacher Strength

School Type	Teachers per School in Rural Areas				Teachers per School in Urban Areas					
	One	Two	Three	Three+	Total	One	Two	Three	Three+	Total
Primary	7.50	40.00	25.00	27.50	100.00	0.00	3.13	3.13	93.75	100
Upper Primary	0.00	0.00	10.00	90.00	100.00	0.00	0.00	0.00	100	100
Elementary	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	100	100
Total	5.77	30.77	21.15	42.31	100.00	0.00	1.37	1.37	97.26	100

Source: Unicef Survey, 1999-2000.

schools and 98 per cent of urban schools have more than three teachers. Teacher's absenteeism, both in rural and urban areas, affects elementary education especially when the school has only one or two teachers.

Student-Teacher Ratio

In rural schools, the student-teacher ratio is 37, 16 and 15 at the primary, upper primary and elementary levels respectively (Table 6.8). In urban areas, these figures are 22, 30 and 30 respectively. At the primary level, it is low in aided and unaided schools compared to government-run schools in rural areas. At the primary level, the student-teacher ratio is only 20 in unaided and 23 in aided schools, while it is 39 in government run schools. At the upper primary level, the ratio is 12 in unaided, 19 in aided and 16 in the government schools.

Table 6.8
Student-Teacher Ratio by Type of School

<i>School Type</i>	<i>Student-Teacher Ratio</i>	
	<i>Rural</i>	<i>Urban</i>
Primary	36.95	22.02
Upper Primary	15.65	30.30
Elementary	14.95	29.53
Total	26.46	27.03

Source: Unicef Survey, 1999-2000.

Distance of Primary Schools

According to the Unicef survey, in Assam 57 per cent of children in the age group 6-9 years have access to primary schools within 1 km, 36 per cent have access between 1-2 km, while the rest 7 per cent have access beyond 2 km, on average (Table 6.9).

Children of STs in urban plains have least access, with only 20 per cent with access within 1 km. For children of tea gardens, the access is moderate: only 36 per cent have access within 1 km. The most unserved children are STs in the hills, about 20 per cent of whom have to go beyond 2 km.

Table 6.9
Distance of Schools Attended by Children aged 6–9 years

<i>Category</i>	<i>Within 1 km</i>	<i>1 to 2 km</i>	<i>Beyond 2 km</i>
Total Assam	57.40	35.87	6.73
Rural (M+F)	58.10	35.51	6.39
Urban (M+F)	49.05	40.10	10.85
SC Rural	72.23	25.54	2.23
SC Urban	39.76	43.76	16.48
ST Plain Rural	53.79	34.26	11.95
ST Plain Urban	19.60	74.01	6.40
ST Hills Rural	40.42	40.12	19.46
ST Hills Urban	53.13	28.13	18.75
Tea Gardens	35.75	46.94	17.31

Source: Chattopadhyay et al. (1994: Tables 5.48a and b).

Teachers' Training

Only 12 per cent of primary, 5 per cent of upper primary and 5 per cent of elementary teachers and 8 per cent of total teachers are trained (Table 6.10). As private primary schools did not respond to the question regarding training of their teachers, there can be no comparison. Trained teachers are relatively more in government schools while private schools lack the same. Trained teachers are relatively more in urban areas than in rural areas.

Only 28 per cent of total teachers are trained and the proportion of trained teachers is 17 per cent, 38 per cent and 30 per cent at primary, upper primary and elementary levels respectively. Private unaided schools have more trained teacher but aided schools have least trained teachers.

Table 6.10
Trained and Untrained Teachers in Assam by Type of School

<i>School Type</i>	<i>(per cent)</i>			
	<i>Rural</i>		<i>Urban</i>	
	<i>Trained</i>	<i>Untrained</i>	<i>Trained</i>	<i>Untrained</i>
Primary	11.30	88.70	16.87	83.13
Upper primary	0.00	100.00	38.29	61.71
Elementary	22.73	77.27	30.00	70.00

Source: Unicef Survey, 1999–2000.

According to the Unicef survey, most of the rural teachers, irrespective of schools and levels, need training mostly in teaching

method, on subject matter, presentation and communication. Urban teachers also need training, mostly in teaching method followed by presentation and communication, subject matter and lesson planning. About 77 per cent of total teachers in elementary schools in rural and 70 per cent in urban areas said they needed training. In order to improve teaching, rural teachers receive on-site support from the head teacher, government officials and other teachers of the same school. In urban schools too, most teachers said they received support from others, but less from government officials.

Teaching Materials Used

The teachers used mostly textbooks (98 per cent in rural and 97 per cent in urban) as a means of teaching. But other materials in moderate use (25–50 per cent) were maps, globe, word books, hand/guide book, science kits and posters both in rural and urban areas (Table 6.11). The use of textbooks was 100 per cent in most cases but it was low among teachers in private aided schools (83 per cent in rural and 92 per cent in urban teachers).

The teaching material next in importance was the wordbook which was used by 41 per cent and 46 per cent of rural and urban teachers respectively. Its highest use was by teachers in private aided schools in both rural and urban areas. Science kits were used by 23 per cent and 18 per cent of rural and urban teachers respectively. It was highest in rural primary and urban elementary school teachers. Flash cards were used by 12 per cent of rural primary and 33 per cent of urban upper primary teachers.

4. PUBLIC EXPENDITURE ON ELEMENTARY EDUCATION

The purpose of this section is to review the trends in public expenditure on elementary education in Assam over a quarter of century (1975–2000). The main question is of adequacy of public spending and related issues of equity, and the consequences of economic reform for the goal of universalising elementary education in Assam. Even though education is primarily a responsibility of the state government, the central government assumed a significant role in the provision of education. The 73rd and 74th Amendments made the local bodies also responsible. The public expenditure on education includes those incurred by different department under the

Table 6.11
Teaching Materials Used by Teachers in Rural and Urban Schools (%)

<i>School Level & Type</i>	<i>Handbook</i>	<i>Workbook</i>	<i>Textbook</i>	<i>Maps</i>	<i>Globe</i>	<i>Poster</i>	<i>Flash Cards</i>	<i>Science Kits</i>
<i>Others</i>								
<i>Teaching Materials Used in Rural Schools</i>								
Primary	38	41	96	50	47	31	12	28
U. Primary	26	43	100	22	13	13	00	09
Elementary	50	00	100	50	50	00	00	00
Government	38	41	98	47	43	27	10	25
Pvt. Aided	33	50	83	00	00	33	00	17
Pvt. Unaided	00	33	100	33	17	00	00	00
Total	35	41	97	43	39	26	09	23
<i>Teaching Materials Used in Urban Schools</i>								
Primary	46	44	97	32	22	19	05	19
U. Primary	28	48	100	20	17	12	33	17
Elementary	31	45	100	28	14	34	10	21
Government	39	46	99	27	20	17	05	20
Pvt. Aided	54	54	92	08	08	15	00	00
Pvt. Unaided	12	44	100	32	16	32	08	20
Total	36	46	97	26	18	19	05	18

Source: Unicef Survey, 1999–2000.

heads of education and technical education. In order to smooth year-to-year fluctuations, the period under study covering 1975–2000 has been broken down into five quinquennia: 1975–80, 1980–85, 1985–90, 1990–95 and 1995–2000.

Expenditure on Education as Percentage of SDP and Budget

The equity aspect of education expenditure requires us to address the allocation of expenditure by level—primary, secondary and higher, the per pupil expenditure on education at these three levels, and finally, the ratios of these three levels. Among the study states, Assam devoted the highest percentage (5.88 per cent) of its Net State Domestic Product (NSDP) to education. Initially it was 3.75 per cent in 1975–80, then fell marginally to 3.60 per cent, and again rose to 4.69 per cent, 5.31 per cent and 5.88 per cent in consecutive quinquennia.

The expenditure on elementary education has also increased to 3.57 per cent in the last quinquennium from 1.71 per cent in 1975–80. Assam spent more than a quarter (27.65 per cent) of its revenue budget on education of which 17.07 per cent was on elementary education, thus constituting 62.1 per cent of total revenue expenditure on education during 1995–2000. During 1975–2000, the share of revenue expenditure on total education varied from 23 to 28 per cent while that on elementary education varied from 11 to 17 per cent. This favoured elementary education as its share increased from 45 to 62 per cent (Table 6.12).

Table 6.12
Expenditure on Education as Share of NSDP
and Revenue Expenditure 1975–2000

Year	Expenditure on Education as % of NSDP		% of Revenue Expenditure on		Expenditure on
	Total	Elementary	Total	Elementary	Elem. Edu. as
	Education	Education	Education	Education	% of total Rev. Exp. on Education
1975–80	3.75	1.71	26.29	11.94	45.5
1980–85	3.60	1.67	23.74	10.95	46.3
1985–90	4.69	2.75	23.07	13.54	58.5
1990–95	5.31	2.89	24.98	13.62	54.4
1995–2000	5.88	3.57	27.65	17.07	62.1

Source: Government of India, various years; Government of Assam, various years.

Note: NSDP—net state domestic product.

Table 6.13
Share of Capital and Revenue Expenditure in Total Expenditure on Elementary Education

<i>Year</i>	<i>Capital Expenditure (%)</i>	<i>Revenue Expenditure (%)</i>
1995–96	0.9	99.1
1996–97	0.9	99.1
1997–98	0.0	100.0
1998–99	1.2	98.8
1999–2000 RE	1.2	98.8

Source: Same as Table 6.12.

Table 6.14
Exponential Growth Rates of Real Expenditure on Education, by Level (1980–81=100)

<i>Year</i>	<i>Elementary (%)</i>	<i>Secondary (%)</i>	<i>Higher (%)</i>	<i>Technical (%)</i>	<i>Total (%)</i>
1975–2000	8.44	5.49	5.96	5.37	6.95
1975–1990	11.23	6.58	8.73	9.53	9.02
1990–2000	6.89	4.03	8.27	2.84	5.27

Source: Same as Table 6.12.

Table 6.15
Percentage of Plan in Total Revenue Expenditure on Elementary and Total Education

<i>Year</i>	<i>Share of Plan in Total Revenue Expenditure (%) on</i>	
	<i>Elementary Education</i>	<i>Total Education</i>
1975–80	10.27	11.14
1980–85	12.77	13.73
1985–90	14.33	17.13
1990–95	24.95	27.46
1995–2000	24.42	27.99

Source: Same as Table 6.12.

Capital and Revenue Expenditure

The expenditure on education refers to expenditure by the Department of Education at the centre and the state. Spending on education has two forms—capital and revenue (recurrent). Capital spending forms a small part of total spending while revenue spending is the bulk in both central and state government spending on education. During 1975–2000, the capital expenditure on total education expenditure was minimum (nearly zero) in 1975–76 and

2.5 per cent in 1976–77. The share of capital account was above 1 per cent prior to 1990 while below 1 per cent 1990 onwards. In elementary education the capital account varies from 0 per cent to 1.2 per cent and the rest is on revenue/recurring expenditure during 1995–2000 (Table 6.13).

Real total education expenditure in Assam during 1990–2000 grew by 5.27 per cent (Table 6.14), lagging behind all study states except Rajasthan. Real expenditure growth on total education fell sharply to 5.27 per cent in 1990–2000 from 9.02 per cent in 1975–90, while that on elementary education also declined to 6.89 per cent in 1990–2000 from 11.23 per cent in 1975–90 (Table 6.14). A similar trend was observed in all other sectors of education, except higher education, where the real expenditure growth rate remained unchanged.

Real revenue spending per capita in total education was Rs 37 in 1975–80 and it rose gradually to Rs 98 in 1995–2000. Similarly, expenditure on elementary education per child in the age group 6–13 years, increased substantially from Rs 73 in 1975–80 to Rs 334 in 1995–2000. Log linear growth rates have been computed for per capita expenditure on total education and it was observed that the growth of this expenditure declined from 7 per cent in 1975–90 to 3.44 per cent in 1990–2000. On the other hand, the growth of expenditure on elementary education per child declined to 7.26 per cent in 1990–2000 from 9.76 per cent in 1975–90. Hence, growth of both expenditure indicators declined in the years of economic reforms. During the last 25 years, growth of per capita expenditure on education was 4.97 per cent while growth of per child expenditure on elementary education was 7.37 per cent per annum.

Plan and Non-plan Spending on Education

Plan expenditure includes expenditure on new schemes: investment (school building, equipment) and recurrent (salaries of new teachers, scholarship, administration). By and large, non-plan expenditure forms the bulk of revenue expenditure by the State government. The share of plan expenditure in total revenue expenditure on total education and elementary education was 27.99 per cent and 24.42 per cent respectively in 1995–2000 (Table 6.15).

The share of plan expenditure in total education increased gradually over time from 11.14 per cent in 1975–80 and that in elementary education also increased substantially from 10.27 per cent in 1975–80. Thus in both the cases, plan expenditure showed an increasing trend and enjoyed the special category status of the state.

In summary, Assam devoted a high proportion of SDP as well as revenue expenditure on elementary education. Assam also devoted the highest percentage of total education expenditure on elementary education during 1995–2000. Plan expenditure as a proportion of total expenditure on elementary education is the highest also in Assam. The highest over all growth in real expenditure on elementary education during the entire period 1975–2000 was experienced in Assam. For the entire period, real expenditure per child grew the fastest in Assam compared to other study states. However, due to the structural adjustment programme, Assam showed a statistically significant lower growth in real expenditure compared to the period prior to adjustment—as for most other states (Srivastava, 2005).

Central Financing of Elementary Education

The central transfer of education expenditure has two components—donor assistance and central assistance. The main donor assistance scheme is DPEP, while Operation Blackboard (OB), the Total Literacy Campaign, Non-formal Education (NFE) constitute central assistance. The central transfers, both donor and domestic, have two components: capital and current expenditure. The share of the capital expenditure is negligible. Teacher salary is a major component in current expenditure. The central expenditure on elementary education is in the form of grants-in-aid to the states through the Centrally Sponsored Schemes (CSS) like Operation Blackboard, Programme of Non-formal Education, Teacher Education Programme, District Primary Education Programme, National Programme for Nutritional Support to Primary Education and Sarva Shiksha Abhiyan.

Analysis of the CSS expenditure across states over a period of four years (1996–2000) shows that four states—AP, MP, UP and Rajasthan bagged over half (51 per cent) of the total CSS expenditure

while states sharing 5–10 per cent each are Karnataka (9 per cent), Maharashtra (7 per cent), Orissa (6 per cent), Bihar (6 per cent), TN (5 per cent), and Assam (5 per cent). Similar distribution also followed in DPEP as it was concentrated more in AP and MP whose combined share is 36 per cent, while Assam's share was 5.5 per cent. In the total CSS expenditure at the all-India level, Assam's share is only 5.1 per cent, and in the schemes, Assam's shares ranges from 3.3 per cent in Teacher Education to 5.6 per cent in DPEP, and no share in Lok Jumbish and Mahila Samakhya.

DPEP

DPEP is probably the most important state intervention conceived of for improving primary education in the country, since the state governments' decision to take over the financial responsibility of running schools in the late 1960s and early 1970s. Assam was one of the first states to introduce DPEP. The first phase of DPEP was introduced in four states in 1993 and soon extended to five more in the second phase of DPEP. The second phase was over in the year 2002. Now that the programme period of DPEP is coming to a close in many states, the official review missions often find the state governments hedging over the question of financial sustainability beyond DPEP. Assam is no exception. The 11th joint review mission observed with obvious dismay that although 'sustaining DPEP activities and institutions would amount to approximately Rs 20–30 million per district, in a system which spends Rs 20,000 million per annum on education sector', in a meeting with the highest state level officials it was indicated to the mission that since more than 90 per cent of the elementary education budget comprised of salaries, there was 'little space in future budgets to finance institutions or activities developed under DPEP without total financial support from the central government'. Thus, while all the review missions over the last few years have noted that the DPEP in Assam was showing result in terms of enrolment-retention, quality improvement of teachers, and so on, the state's lack of enthusiasm to keep its commitment to DPEP may nullify the achievements of DPEP once the funding stops as this will happen to many states.

5. HOUSEHOLD EXPENDITURE OF PUBLIC AND PRIVATE SCHOOLING

While the previous section dealt with public spending, this section deals with household expenditure on schooling, that is demand-side factors that affect enrolment and dropout. How does out-of-pocket expenditure affect a family's decision to send a child—especially the girl child, SC and ST child—to school? The mandatory expenditure (like fees, uniform, books and stationery) as well as discretionary expenditure (like transport, pocket expenses, private tuition) varies by type of school.

Household Expenditure in Primary Education

The average household expenditure on a child's primary education is Rs 544 in rural areas (Table 6.16) as compared to Rs 1,883 in urban Assam (Table 6.17). In rural Assam, the gender difference in household expenditure is low in the traditional districts but much biased towards boys in the advanced districts. Gender bias apart, there is a caste difference too. For a rural OBC boy the household's expenditure on schooling is more than double that for a ST girl. The expenditure for a upper-caste urban boy is one-and-a-half times that for a SC girl.

According to the Unicef survey, in both rural and urban Assam, the household expenditure on a child's primary education increases with the income of the household. The average expenditure on a rural child varies between Rs 401 and Rs 1,030 for lowest and highest income groups of households. The average expenditure on a urban child of the respective groups varies between Rs 468 and Rs 4,270. Expenditure on an urban girl of a post graduate parent is highest (Rs 3,192) while that for a girl is least (Rs 392) for parents with education at primary level.

The Unicef survey also reveals that the average household expenditure in rural as well as urban Assam varies by the type of school. While it is least for government schools in both the cases, it is highest for private unaided schools in rural and for private aided schools in urban areas. Although there is no gender difference in household expenditure on schooling as a whole as well as in government schools, it is alarming in private unaided schools where expenditure for a boy is double that for a girl.

Table 6.16
Household Expenditure on Schooling in Rural Assam (Rs per annum)

Item	Primary Education			Elementary Education		
	Boys	Girls	Total	Boys	Girls	Total
Total	544	544	544	657	612	637
Uniform	179	183	181	410	193	203
Footwear	95	108	101	104	111	107
Stationery	97	99	98	110	97	104
Books	43	39	41	67	58	63
Dev. Fees	29	39	33	36	40	38
Exam. Fee	18	16	17	21	20	20
Transport	25	n	14	48	31	40
Others	58	60	59	65	62	62

Source: Unicef Survey, 1999–2000.

Table 6.17
Household Expenditure on Schooling in Urban Assam (Rs per annum)

Item	Primary Education			Elementary Education		
	Boys	Girls	Total	Boys	Girls	Total
Total	1,993	1,751	1,883	2,302	2,291	2,297
Uniform	273	265	269	318	306	312
Footwear	164	156	160	193	183	189
Stationery	258	231	245	295	276	286
Books	199	201	200	276	282	279
Dev. Fees	841	685	770	922	884	905
Exam. Fee	45	40	43	50	50	50
Transport	155	113	136	188	263	213
Others	58	60	60	60	67	63

Source: Same as Table 6.16.

Household Expenditure in Elementary Education

Most of the children in rural areas and half of the children in urban areas study in government elementary school and spent very little on schooling, while a few studied in private schools and spent a lot. Only the rural children belonging to OBC, and their parents with graduate-level education, and having annual income of about Rs 75,000, send their children to private unaided schools; they spend Rs 1,370 per annum per student. In urban areas, upper-caste parents with post-graduate education, and engaged as manager/senior officers with an annual income above Rs 100,000 send their children to private aided schools and spend the maximum.

The household expenditure per child at primary, upper primary and elementary level in rural and urban Assam is different and the sources of variation are the habitation, gender, caste, management type of the school, parents' education, income and occupation. In rural Assam, 96 per cent of children study in government schools and only 2 per cent each in private aided and unaided schools. The household expenditure is lower in government schools than in the private schools; in the latter, parents having higher income and education spend more. In urban Assam, 58 per cent study in government schools, 41 per cent in government aided schools and the rest 1 per cent in private unaided schools. The urban poor send their children to less costly government schools and the rich send their children to more costly private unaided school.

Total expenditure on education for several children at school-going age in poor households becomes unaffordable; as a result poor parents seem to be apathetic in sending their children to school. The expenditure on primary education on a rural child is Rs 544, of which the combined share of uniform (33 per cent), footwear (19 per cent) and stationery (18 per cent) is 70 per cent of total expenditure. In government schools, these three items cover 73 per cent. The share is higher for transportation, development fees and pocket expenses in private schools. The principal component for the urban child is development fees (41 per cent) in all schools, but development fees and transportation (presumably because they are few and far between) for private schools.

The pattern is not dissimilar at the upper primary level. The main components at upper primary level in rural areas are uniform, footwear and stationery which cover 60 per cent of total expenditure. Expenditure on uniforms is higher for boys of the rich and the affluent. In fact, expenditure on individual items is higher for boys than of girls.

How Household Expenditure Affects Enrolment

Interest in education among poor and illiterate parents is high but that does not translate into enrolment of their children because of adverse socio-economic circumstances. Poor households cannot afford to send their children to school because of the direct and indirect expenditure on schooling. In rural and urban Assam, the

household expenditure is proportionately higher for low-income groups than high-income groups. A rural destitute household spends as much as 24 per cent of annual income for a single child while a rich household spends only 1 per cent. Again, for the former group enrolment is only 57 per cent while for the latter enrolment is 100 per cent. In urban Assam, the expenditure for a child is 13.4 per cent of the annual income of a poor householder (for whom it is four times harder, than it is for a rich householder, to send a child to school).

Among the poor urban households only 28 per cent are currently enrolled, so for universal enrolment of their children as much as 50 per cent of their total income is needed. Hence, for universal enrolment, the expenditure is unbearable especially for the rural destitute and the poor in both the areas.

6. ONGOING AND FURTHER REFORMS FOR UEE

This section deals with the challenges faced by elementary education during the ongoing economic reforms initiated since 1991. How well has the state responded to the challenges? How can teachers' accountability be ensured by decentralising and devolving authority to the panchayat? What can be the accountability procedure replacing inspection system? How can parents be involved in the new accountability system?

Decline of Education Expenditure in Structural Adjustment

A fiscal crisis and balance of payment problems led to economic reform in 1991. The structural adjustment measures included the curbing of fiscal expenditure by the central government and a series of measures adopted by states to bring about fiscal stabilisation. The curbing of expenditure by both central and state governments led to declining share of development expenditure as well as capital expenditure. Total education expenditure was significantly lower during the structural adjustment period. Moreover, the growth rate in total education expenditure dipped during the period of structural adjustment in all states, including Assam. In fact, the growth rate of expenditure on elementary education in the structural adjustment period is lower by 1.47 per cent in Assam.

Absenteeism of Teachers

Teacher absenteeism affects elementary education especially when the school has only one or two teachers. There is a failure of the inspection system. We feel that the existing system has a loophole. The sub-inspectors seldom visit schools under their jurisdiction and rely mainly on the circle secretary.

Non-teaching Outside Activities of Teachers

Besides teaching, teachers performed non-teaching activities—like discussions with the head-teacher, parents and the community for the smooth functioning of schools. These activities occur within the school, but some other outside teacher activities like meetings with Block Education Officer (BEO), coordination with management and participation in public meetings virtually resulted in a holiday for the schools. In these activities, a teacher spent almost five days a month in all schools combined, about eight days a month in elementary and upper primary schools, five days in primary, government and private aided schools and almost two and a half days in unaided schools (Table 6.18).

Community Participation in Management of Elementary Education

The 73rd and 74th Amendments to the Indian Constitution in 1993 enlarging the powers of local bodies have made village education committees a responsibility of the local bodies. We found that only 38 per cent of government schools teachers held any discussions with the Village Education Committee (VEC). The private schools ignore the VEC as they are not required to do so.

Ineffectiveness of the Incentive Programmes

The school incentive programmes in all the states of India account for 5 per cent of total education expenditure. Despite their importance, little evidence exists on the efficiency of the programmes or their effectiveness in improving enrolment and retention rates. There are four types of incentives in operation, the major ones being the distribution of free textbooks, followed by midday meals, scholarship and others—but there is complete absence of free

Table 6.18
Days Spent by Teachers on Non-teaching Activities by Type of School and Area

School Type	No. of Days Spent per Month on									
	Coordination with Mgmt.		Meeting with BEO/CE		Participation in Public Meeting		Others		Total	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Primary	2.4	2.9	1.1	0.1	0.6	0.1	0.5	0.0	4.6	3.1
Upper primary	3.6	3.0	2.4	0.1	0.1	0.0	1.7	0.0	7.8	3.1
Elementary	6.5	2.1	1.0	0.0	0.0	0.0	0.5	0.0	8.0	2.1
Government	2.9	3.0	1.5	0.1	0.5	0.0	0.9	0.0	5.0	3.1
Private Aided	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0
Private Unaided	1.4	5.0	0.6	0.0	0.2	0.0	0.2	0.0	2.4	5.0
Total	2.8	2.8	1.4	0.1	0.4	0.0	0.8	0.0	4.7	2.9

Source: Unicef Survey, 1999-2000.

uniforms, stationery, attendance money. In rural Assam 87.5 per cent of students benefit from free textbooks at the primary, upper primary and elementary levels. Coverage of midday meal is only at 4 per cent at all the levels of education. Scholarships are totally absent at primary level but cover 2 per cent of children in upper primary and 1 per cent in elementary level; the beneficiaries are mainly SC boys.

In urban Assam, textbooks are distributed to 45.5, 40, and 42.5 per cent of boys, and 52.5, 29.6 and 41.7 per cent of girls at primary, upper primary and elementary levels respectively. So, both in rural and urban areas, the distribution of free textbooks and uniforms is supposed to be used to reduce household expenditure but such incentives provided by the state are quite inadequate. Thus, the incentives are inadequate and ill-targeted and least responsive to their objectives.

Sarva Shiksha Abhiyan (SSA)

Since 2000–01 the central government has started an umbrella scheme, the Sarva Shiksha Abhiyan (SSA), in mission mode with a holistic and convergent approach. The effort is to incorporate all existing programmes of elementary education of the central category under the new framework in consultation and partnership with state. The goals of the SSA are to ensure that all children in the 6–14 age group are in school or EGS centres by 2003; and all 6–14 year olds complete primary school by 2007 and elementary school by 2010. The approach of SSA is community centred and village based education. Plans prepared by PRIs will form the basis of district education plans. Funds to the States will be channelled through registered societies at the State level. There will be a focus on districts having low literacy among SC/ST. The SSA will cover the entire country with a special focus on educational needs of the girl child, SC/ST and other children in difficult circumstances.

7. POLICY RECOMMENDATIONS

A few things are evident from the discussion above. First, so far as private initiative in the spread of primary/elementary education is concerned, it is confined to towns and cities. A substantial number of private schools absorb a large number of school goers

in these areas. However, since the government does not recognise these schools at all, no effort is made to estimate the number of children that are absorbed by the private system. This in its turn affects the government statistics on enrolment and dropout and the requirement of new school facilities. A proper assessment of the share of the private investment in the school facilities would help the government to have a better distribution of its scanty resources in providing universal access to elementary education to its people. For example, it is possible to withdraw a substantial part of government facilities from the urban regions and re-channelise the same to rural Assam which does not attract much private investment.

Second, it is evident that more than the increase in number of schools and teachers, it is the proper redistribution of teachers, and sometimes schools too (for example from urban to rural areas), that is necessary to augment the delivery system of UEE in Assam.

Third, the policy makers need to understand that more than 'dropout', it is the non-enrolment and irregular attendance of students that remains the root cause of the problem. These are related to the quality of the delivery system as such. The infra-structural facilities, of the rural schools in particular, can in no way attract the young children to the school. The irregular attendance of many a teacher aggravates the problem further. This is, in turn, related to the supervision and monitoring system. The age-old system of inspection can no more work as the number of schools per circle/sub inspector has far exceeded the ability of the inspector to supervise. The introduction of the VEC/PTA is a step in the right direction and should be introduced in all the schools with greater urgency. The VECs should also be empowered to discipline errant teachers.

We may conclude by pointing out that the authorities should take note of the financial burden on the parents who send their children to schools. It is not correct to claim that elementary education is given free. Just tuition fee waiver does not make it so. High expenditure of education itself may deter a number of poor parents from continuing their wards' education. The planners should look into the ways the financial burden to the people below poverty line could be minimised. An organised and corruption-free midday meal programme with hundred percent coverage will help to improve the system to a large degree.

Notes

1. Often middle school education is offered as part of a secondary school. In other words, remote rural schools are likely to be offering only primary education. As opposed to this, middle school classes may be part of the primary school as well.
2. It is often particularly difficult to obtain data for Classes 5 to 8. Since the higher classes are only in secondary or higher secondary schools, which are much better organised—although much smaller in number—the quality of data again improves. As a result, in some cases, our discussion is confined to primary level alone.
3. The Unicef 1999–2000 survey covered 125 schools of which 52 were in rural and 73 were in urban areas. Out of 52 rural schools, 40 were primary, 10 middle school and rest two elementary schools. Among 73 urban schools, 32 were primary, 26 middle school and 15 elementary schools.

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7

Cost and Financing of Elementary Education in West Bengal

TAPAS MAJUMDAR

1. INTRODUCTION¹

This chapter, like the others in this book, is based on a field survey based on a sample representative of the state, carried out in the academic year 1999–2000 (see details for West Bengal in Appendix 7A-1). The chapter analyses current enrolment indicators and quality of schooling, trends in government expenditure on elementary education and the role of the private sector in the financing of elementary education in West Bengal (WB).

I have addressed some basic issues to help achieve modern India's Education For All (EFA) targets:

- how to effect the change from the centralist to state and district level paradigms and mindsets in education policy;
- how to draw the road map for West Bengal's progress towards universal literacy and basic EFA in a way that would prepare everybody for actively participating in the high-technology society that India is striving to become;
- how to pursue the goal of EFA at the grassroots level while being aware of West Bengal's multilingual and multicultural society, accepting the child's right to literacy, and early education in her mother tongue;
- how to relate EFA to the state's constitutional responsibility as decreed by the Supreme Court of India (1993) or as laid down in the Constitution Amendment (86th Amendment) Act, 2002.

I have kept in view the 'rights-based' approach to Universal Elementary Education (UEE) that is gradually replacing the old 'labour-productivity' or 'returns to education' approach because of the judicial and constitutional positions that have become mandatory. I have also implicitly followed the international consensus on targeting the two basic objectives of educational policy of our time: (a) setting achievable human development goals in education, and (b) the early attainment of gender equality in respect of the girl child's access to schooling.

This chapter is organised as follows. Section 2 presents an overview of the West Bengal school system as a heterogeneous system serving a divided society, and also compares the state's performance relative to other states. Section 3 presents the main findings of the Unicef survey, including enrolment and attendance by caste and gender, dropout rates and rates of never-enrolled. It also examines the private sector as a provider, comparing quality of facilities with government schools. It also examines the public spending pattern on education, and then goes on to examine the household spending on private and government schooling. Section 4 is devoted to an examination of the state government's response to the problems of the elementary school system—specifically by creating alternative schools with para-teachers (or *shishu shiksha kendras*). The final section examines the policy priorities for the state government.

2. ELEMENTARY EDUCATION SYSTEM IN WEST BENGAL

Chain of Command in School Administration

Under the Minister of School Education is the principal secretary to the government in the Department of School Education. The department has a number of joint secretaries, deputy secretaries and assistant secretaries in the usual pattern of state government departments. The department, often referred to as 'government', is clearly separated from its executive branch—the 'directorship'.

The director of school education is the head of the executive arm of the Department of School Education, but is separated from the secretariat which determines government policy. Parallel to the director of school education is the director of accounts. There are also four other autonomous authorities working side by side

and in conjunction with the Directorate of School Education. We are concerned here mainly with the West Bengal Board of Primary Education which deals with Classes 1 to 4 and the West Bengal Board of Secondary Education which deals with Classes 5 to 10.²

Under the Directorate of School Education works the district inspector of primary education in each of West Bengal's 19 school districts. The district inspector of schools (PE) controls and supervises the circle offices and the Primary Teachers' Training Institute (PTTI) of the district.³

The West Bengal Board of Primary Education is headed by a president who is assisted by an executive secretary. The board is responsible for the supervision and control of primary education in the state of West Bengal. However, as a measure of decentralisation and democratisation, the government has also set up through legislation a separate autonomous body in each district for the control of primary school education called the District Primary School Council (DPSC). The needed trend towards decentralisation will be discussed in the coming sections.

Schools in West Bengal—A Heterogeneous System Serving a Divided Society

In West Bengal, as in the other states of India, 'elementary education' must mean very different things to the children coming from different segments of society. There are two pervasive features of the difference: one is the rural-urban divide in human habitation; the other is the gross difference between living conditions and incomes within society, particularly urban society (Majumdar, 1992). For example, the per capita income in the urban areas is about twice that of villages; the literacy rates in the cities are also twice that of villages; compared to the average school in urban areas, the average village school is appallingly undersupplied. However, the averages hide the worst, as the children of unemployed (and illiterate) urban parents live the life of the poorest of the poor in all circumstances.

For a broad picture of elementary (that is primary and higher primary) schooling in West Bengal, it may be useful to view the schools as belonging to socio-economic categories. We have tentatively suggested a fourfold classification here. The four types are not necessarily indicative of different forms of school ownership or management, but rather of the different kinds of education

provided (implicitly indicating the quality of education alongside the facilities available or expected in the school).

The first type consists of the prestigious private schools (usually called 'public schools' as in the rest of India) run by well-endowed school societies. Admission is usually difficult, and the tuition is expensive. These are highly valued by parents and by society at large. It is the expensive nursery institutions that are mostly able to send their children to the best private schools and thereby secure a head start for the children of the elite classes. There are also some high-performing, non-elite children with parents determined to bear the relatively high costs, but their number is small.

The second is a small group of central government schools (originally started for the children of central government employees posted to various states). The central schools are all affiliated with the Central Board of Secondary Education, as well as some of the prestigious private schools. The central schools draw from nearly all sections of people, and their students compete strongly with the private schools for the top positions in the central board examinations.

The third group is a mixture of government and private institutions. The state government schools, more numerous than the central schools, belong to it, as well as the old and reputed private schools of West Bengal. Their previous high standards have been dramatically lowered, but for a few notable exceptions. These schools are usually affiliated with the West Bengal Board of Secondary Education and Council of Higher Secondary Education.

The fourth group is also a mixture of both local government and private schools, with their commonality being their indifferent quality and lack of basic facilities. These schools are either set up by municipalities and other local government bodies, or are poorly-provided urban or rural private schools. They are affiliated with the West Bengal Board or Council. The large bulk of schools providing only primary education in West Bengal, as in other parts of the country, belong to this unfortunate category. At the last count (1997–98) about 8.5 million students were found to be attending West Bengal's 51,021 primary schools. The primary schools in many cases (in all cases government schools) take only Classes 1–4 in West Bengal (unlike in most other major states where primary level refers to Classes 1–5), which forces students to change schools for Class 5 in order to finish primary education.

There was a popular myth, now gradually being dispelled, that the people of India are either unwilling or unaccustomed to making monetary sacrifices for the education of their children. The report on the 42nd Round of the National Sample Survey, 1987⁴ first destroyed the myth when it was discovered that parents of almost all income groups, in general, incurred relatively significant private expenses due to their children's education. In fact, most parents were not deterred by the fact that even 'free education' for children admitted to government schools did come with additional costs for various items in the school which went beyond the increased expenses for food, clothing and sometimes transportation. Most of the new evidence also suggested that even poor and illiterate parents know that schooling may provide future returns, making the current sacrifices worthwhile.

Not Educationally Backward—Relatively Speaking

The positive impact of the expansion of elementary education among children can arguably be felt in many spheres of the social and economic life of people. One important and dependable indicator of such an impact is the rate of literacy among men and women (particularly adults). For the latter group, the improvement would appear only after a time lag of one or two decades. Compared to the national literacy rate of 43.7 in Census 1981, West Bengal's literacy rate was 48.6; in 1991 the respective rates were 52.2 and 57.7, and in 2001 65.4 and 72.9.

West Bengal, despite its deficiencies, has belonged to the better-performing group of states over the past four decades, and there had also been significant increases in government expenditure for the improvement of elementary education too. However, the share of elementary education in the state domestic product has been falling in recent years, which is a cause of concern as we will see.

On the positive side, the more recent improvement in literacy rates has been quite rapid since the 1991 Census. The figures from the National Sample Survey 53rd Round for 1997 literacy rates (persons 72%; male 81%; female 63%) were very satisfactory, though these have not been completely borne out by the Census of 2001 as will be seen below. But the all-round improvement in the state of literacy was still substantial compared to the figures of the Census of 1991 (see Table 7.1).

Table 7.1
Number of Literates by Sex, and Literacy Rates in 1991 and 2001, West Bengal

State/District	Number of Literates (2001)						Literacy Rate					
	Males		Females		Persons		Males		Females		Persons	
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
West Bengal	47,821,757	27,784,750	20,037,007	57.70	67.81	46.56	72.87	81.28	63.92	72.87	81.28	63.92
Darjeeling	1,029,561	592,037	437,524	57.95	67.07	47.84	72.87	81.28	63.92	72.87	81.28	63.92
Jalpaiguri	1,839,036	1,099,897	739,139	45.09	56.00	33.20	63.62	73.64	52.90	63.62	73.64	52.90
Koch Bihar	1,409,350	828,163	581,187	45.78	57.35	33.31	67.21	76.83	57.04	67.21	76.83	57.04
Uttar Dinajpur	941,822	595,510	346,312	34.58	45.24	22.85	48.63	59.27	37.16	48.63	59.27	37.16
Dakshin Dinajpur	812,254	474,415	337,839	46.40	56.75	35.33	64.46	73.30	55.12	64.46	73.30	55.12
Maldah	1,348,230	810,591	537,639	35.62	45.61	24.92	50.71	59.24	41.67	50.71	59.24	41.67
Murshidabad	2,662,682	1,525,674	1,137,008	38.28	46.42	29.57	55.05	61.40	48.33	55.05	61.40	48.33
Birbhum	1,574,915	932,167	642,748	48.56	59.26	37.17	62.16	71.57	52.21	62.16	71.57	52.21
Bardhaman	4,290,672	2,502,422	1,788,250	61.88	71.12	51.46	71.00	79.30	61.93	71.00	79.30	61.93
Nadia	2,669,296	1,500,537	1,168,759	52.53	60.05	44.42	66.55	72.67	60.06	66.55	72.67	60.06
North 24 Parganas	6,207,540	3,470,763	2,736,777	66.81	74.72	57.99	78.49	84.35	72.13	78.49	84.35	72.13
Hugli	3,367,052	1,900,254	1,466,798	66.78	75.77	56.90	75.59	83.05	67.72	75.59	83.05	67.72
Bankura	1,750,632	1,084,510	666,122	52.04	66.75	36.55	63.84	77.21	49.80	63.84	77.21	49.80
Puruliya	1,199,357	812,568	386,789	43.29	62.17	23.24	56.14	74.18	37.15	56.14	74.18	37.15
Medinipur	6,227,294	3,610,329	2,616,965	69.32	81.27	56.63	75.17	85.25	64.63	75.17	85.25	64.63
Haora	2,935,210	1,665,611	1,269,599	67.62	76.11	57.83	77.64	83.68	70.93	77.64	83.68	70.93
Kolkata	3,428,309	1,947,621	1,480,688	77.61	81.94	72.09	81.31	84.07	77.95	81.31	84.07	77.95
South 24 Parganas	4,128,545	2,431,681	1,696,864	55.10	68.45	40.57	70.16	79.89	59.73	70.16	79.89	59.73

Source: <http://www.censusindia.net/results/literacy.html>.

Note: Literates and Literacy Rates updated 18 May 2002.

*Quality⁵ as Reflected in Single-Teacher Schools
and Student-Teacher Ratio*

In terms of school facilities availability, Ray (1999) had first drawn our attention to the persistence of one-teacher primary schools in West Bengal. After Operation Black Board⁶, a second teacher should have been provided in each one-teacher school. But Table 7.2 below proves differently.

There has already been an important Supreme Court case that may be growing in importance over the coming years: Writ Petition (C) No. 81/94 of Shri Satya Pal Anand vs. Union of India and Others. Under the Supreme Court's direction, the union government as well as the governments of the states and union territories had to submit information to the court concerning the eight relevant areas that were agreed upon (the 'areas of energisation').⁷ One such area (Area Four) deals with 'converting all single-teacher schools into dual-teacher primary schools as envisaged in Operation Blackboard'. It is understood that the Government of West Bengal had informed the Court that the state still had (in 1997) just 1,679 single-teacher primary schools. The Government of West Bengal also informed the Court that they proposed to convert all single-teacher schools to two-teacher schools by 1998!

Table 7.2
Number of Single-teacher Schools, West Bengal

<i>District</i>	2002-03	2003-04
<i>DPEP</i>		
Bankura	350	484
Birbhum	90	80
Dakshin Dinajpur	23	25
Jalpaiguri	112	91
Koch Bihar	35	29
Maldah	38	52
Murshidabad	92	36
Puruliya	1,073	1,262
South 24 Parganas	316	394
Uttar Dinajpur	290	41
<i>Non-DPEP</i>		
Bardhaman	91	60
Darjeeling	117	NA
Haora	112	23
Hugli	192	107

(Table 7.2 contd.)

(Table 7.2 contd.)

District	2002-03	2003-04
Kolkata	121	170
Nadia	32	42
North 24 Parganas	408	457
Paschim Medinipur	278	NA
Purba Medinipur	124	186
Siliguri	7	NA
Total	3,901	3,539

Source: DPEP—Reports Cards, 2003; NIEPA, 2002-03; DISE data provided by the Paschim Banga Rajya Prarambhik Shiksha Unnayan Sanstha (DPEP/ SSA Mission) for 2003-04. The DPEP report card provided the percentage of single-teacher schools in each district which has been converted to an absolute number by using the total number of schools.

Note: NA: Not Available.

Table 7.3
Number of Primary Schools, Teachers and Teacher-Pupil Ratio (TPR)
in Primary Schools, West Bengal

Year	Number of Schools	Total Enrolment	Number of Teachers			% of Female Teachers	TPR
			Male	Female	Total		
1992-93	48,735	8,061,045	115,668	52,990	168,658	31.4	48
1993-94	48,557	8,014,848	122,426	35,764	158,190	22.6	51
1994-95	51,021	10,234,923	124,532	37,465	161,997	23.2	63
1995-96	51,021	9,708,543	117,625	37,589	155,214	24.2	63
1996-97	51,021	9,257,481	117,181	37,447	154,628	24.2	60
1997-98	51,021	8,907,736	117,443	38,814	156,257	24.8	57
1998-99	52,123	8,948,677	114,489	34,582	149,071	23.2	60
1999-2000	52,385	9,469,320	115,399	35,147	150,546	23.3	63
2000-01	52,385	10,015,955	118,035	38,220	156,255	24.4	64
2001-02	52,426	10,151,362	115,874	36,097	151,971	23.7	67

Source: *Education in India* (1992-93 to 1996-97); *Selected Educational Statistics*, (1997-98 to 2001-02).

The Teacher-Pupil Ratio (TPR) has been increasing in the state since 1998-99 after registering a decline during 1993-94 and 1997-98. However, it appears that the data taken from national sources (as used in Table 7.3) uses enrolment for Classes 1 to 5 and the number of teachers in primary schools which mostly have only four classes. If one takes enrolment only for Classes 1 to 4, the TPR has been in the range of 1:52 to 1:54 in the 1990s. This means that though the TPR is indeed high it is not as high as it appears in national statistical reports. Table 7.4, which is based on enrolment in Classes 1 to 4, reveals that inter-district variations are also high.

Another important area in which West Bengal seems to be lagging behind is addressed by area two of areas of energisation: 'Upgrading primary schools to the Upper Primary level by lowering the present ratio of 4:1'. The national average has improved further and is now 3.47:1, whereas the updated West Bengal ratio is 5.87:1, which is the highest (or the worst) in the country.

Table 7.4
Districtwise Teacher-Pupil Ratio (TPR), West Bengal

<i>District</i>	<i>2001-02</i>		<i>2002-03</i>	
	<i>Primary</i>	<i>Upper Primary</i>	<i>Primary</i>	<i>Upper Primary</i>
<i>DPEP</i>				
Bankura	41.1	35.1	35.0	43.0
Birbhum	49.8	35.1	47.0	50.0
Dakshin Dinajpur	47.2	36.0	46	30
Jalpaiguri	66.4	60.7	66	74
Koch Bihar	61.0	59.1	54	78
Maldah	58.9	49.6	61	47
Murshidabad	69.8	51.0	70	66
Puruliya	44.7	30.0	44	42
South 24 Parganas	73.5	43.5	73.0	56.0
Uttar Dinajpur	87.4	42.2	87.0	54.0
<i>Non-DPEP</i>				
Bardhaman	NA	NA	44.0	48.0
Darjeeling	NA	NA	35	37
Haora	NA	NA	50	45
Hugli	NA	NA	52	57
Kolkata	NA	NA	43	37
Nadia	NA	NA	59	67
North 24 Parganas	NA	NA	58	53
Paschim Medinipur	NA	NA	41	49
Purba Medinipur	NA	NA	49	64
Siliguri	NA	NA	59	68

Source: DPEP-Reports Cards, 2002 and 2003; NIEPA, 2002-03.

Note: NA: The data for non-DPEP districts not available for the year 2002 from the same source.

3. THE SURVEY FINDINGS

Overview

According to the results of the Unicef survey, the Gross Enrolment Ratios (GER) at the primary level were equally high in rural and

urban areas (109 per cent and 119 per cent respectively, Table 7.5). However, the lower Net Enrolment Ratios (NER) compared with the GER proves that a substantial proportion of the relevant age-group children remain outside the fold of schooling and greater effort is required to attract to, and retain them in, the elementary schools. (In urban areas, the NER was 82 per cent compared to the GER of 119 per cent).

Overall, GER and NER at the upper primary levels were much lower than primary level figures. It obviously reflects the more limited access for upper primary school level, particularly in rural areas (rural GER was 66 per cent and NER was 33 per cent). The lower enrolment at the upper primary level can also be attributed to the fact that after the completion of Classes 1 to 4, the student must move to another school.

Table 7.5
GER and NER by Level and Location 1998–99 (%)

<i>Level</i>	<i>Urban</i>	<i>Rural</i>
<i>Primary</i>		
GER	119	109
NER	82	80
<i>Upper primary</i>		
GER	81	66
NER	47	33

Source: Unicef Survey, 1999–2000.

The gender differentials in terms of enrolment seemed lower than in other Indian states. Moreover, West Bengal presented cases where girls' enrolment was slightly higher than boys' enrolment. This was the case for the NER at the primary level where for girls, enrolment was 83 per cent compared to 82 per cent for boys (Table 7.6). The largest gender differential was with the GER at the upper primary level in rural areas with a differential of 7 percentage points. Important progress towards gender equality has been made, although caste-level differentials, as will be shown later, are unsatisfactory.

As is well known, there is a major difference between enrolment and attendance, and official enrolment figures are not to be trusted. We have estimated the never-enrolled and dropout rates on the basis of the survey (see Tables 7.7 and 7.8).

Table 7.6
GER and NER by Location, Gender and Level, 1999 (%)

NER/GER	Urban		Rural	
	Male	Female	Male	Female
GER (primary level)	116	112	110	108
GER (upper primary level)	84	78	70	63
NER (primary level)	82	83	81	80
NER (upper primary level)	49	46	34	31

Source: Unicef Survey, 1999–2000.

Table 7.7
Never-enrolled Children by Location and Age (%)

Age/yrs	Rural Areas			Urban Areas		
	Boys	Girls	Total	Boys	Girls	Total
6–10	16	17	16	9	9	9
11–13	11	14	13	4	8	6

Source: Unicef Survey, 1999–2000.

Table 7.8
Dropout Children by Location and Age (%)

Age/yrs	Rural Areas			Urban Areas		
	Boys	Girls	Total	Boys	Girls	Total
6–10	2	3	2	3	4	4
11–13	10	11	11	11	12	12

Source: Unicef Survey, 1999–2000.

As reflected in Table 7.7, the proportion of never-enrolled children is very high for both younger children (6–10 years old) and older children (11–13 years old) in rural areas. This could be due to a variety of reasons, the limited availability of schools being one of them. However, the presence of a significant proportion of children even in the younger age group is worrying. The older age group has understandably a higher proportion of dropouts in both rural and urban areas. Although the proportion of never-enrolled is less in urban areas, the proportion of dropouts in urban areas is as high as in rural areas.

Girls seem to face more difficulties than boys do in enrolling and continuing elementary school. As shown above, non-enrolment and dropout rates for girls were higher. However, in urban areas, the disparity seems to be waning in enrolment of the younger age group of girls (6–10 years old).

Attendance by Caste and Gender

In order to have a clearer picture of the situation in West Bengal, it is important to analyse the attendance indicators by caste. Those responding are in Classes 1–8 at school and below 18 years of age.

As mentioned above, the good sign regarding progress towards gender equality can be seen in the overall ratio involving female participation in schools. Of the 10,216 responding students in the rural sample, the ratio of girls to boys is 90 per cent. Similarly, in the urban sample of 4,052, that ratio is 91 per cent (Table 7.9). However, this seemingly positive result is weakened when one looks at the breakdown of these numbers. The ratio of girls to boys among the Scheduled Caste (SC) students is unsatisfactory, as the number is just 79 per cent in rural areas, and just over 80 per cent in the urban sample. What is even more worrying is that among the Scheduled Tribe (ST) students this number is far worse. The ratio is just over 63 per cent in the rural sample, and in the urban sample, no ST students of either sex responded. Around 5.6 per cent of West Bengal's total population is made up of tribes (with the Santhals, Oraon, Moonda and Bhunji groups constituting 90 per cent) living in concentrated and not scattered habitations. Considering the fact that Burdwan and Medinipur are two of the five districts⁸ in West Bengal in which they are concentrated, their complete absence among the records of school-going children in the urban areas and insignificant presence in the rural areas⁹ must be regarded as an alarming sign (Table 7.9).

Table 7.9
Attendance by Caste and Gender

<i>Caste</i>	<i>Rural Sample</i>			<i>Urban Sample</i>		
	<i>Boys</i>	<i>Girls</i>	<i>Total</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>
SC	860	678	1,558	599	482	1,081
ST	179	113	292	0	0	0
OBC	313	285	598	113	119	232
Other	2,819	2,702	5,521	1,409	1,330	2,739
Total	5,346	4,870	10,216	2,121	1,931	4,052

Source: Unicef Survey, 1999–2000.

Notes: OBC = Other Backward Classes; SC = Scheduled Castes; ST = Scheduled Tribes.

All children below 18; attending classes 1–8.

Table 7.10
Enrolled, Dropped-out and Never-enrolled Children
by Caste, Gender and Location
 (6–14 years of age)

Caste M/F	Rural Sample									
	Total Responses		In School		Dropped Out		Never Enrolled		No Response	
	Absolute Number	%	Absolute Number	%	Absolute Number	%	Absolute Number	%	Absolute Number	%
SC M	1,560	100	1,207	77	105	7	244	16	4	0
ST M	337	100	251	74	36	11	47	14	3	1
OBC M	508	100	467	92	24	5	16	3	1	0
Other M	3,793	100	2,983	79	246	6	558	15	6	0
Total M	6,198	100	4,908	79	411	7	865	14	14	0
SC F	1,478	100	995	67	142	10	339	23	2	0
ST F	288	100	167	58	48	17	73	25	0	0
OBC F	482	100	441	91	27	6	13	3	1	0
Other F	3,633	100	2,913	80	199	5	513	14	8	0
Total F	5,881	100	4,516	77	416	7	938	16	11	0
All SC	3,038	100	2,202	72	247	8	583	19	6	0
All ST	625	100	418	67	84	13	120	19	3	0
All OBC	990	100	908	92	51	5	29	3	2	0
All Other	7,426	100	5,896	79	445	6	1,071	14	14	0
Total	12,079	100	9,424	78	827	7	1,803	15	25	0

Caste M/F	Urban Sample									
	Total Responses		In School		Dropped Out		Never Enrolled		No Response	
	Absolute Number	%	Absolute Number	%	Absolute Number	%	Absolute Number	%	Absolute Number	%
SC M	672	100	527	78	77	11	66	10	2	0
ST M	0	0	0	0	0	0	0	0	0	0
OBC M	115	100	96	83	11	10	5	4	3	3
Other M	1,498	100	1,287	86	93	6	90	6	28	2
Total M	2,285	100	1,910	84	181	8	161	7	33	1
SC F	604	100	437	72	62	10	97	16	8	1
ST F	0	0	0	0	0	0	0	0	0	0
OBC F	127	100	114	90	4	3	7	6	2	2
Other F	1,467	100	1,247	85	100	7	97	7	23	2
Total F	2,198	100	1,798	82	166	8	201	9	33	2
All SC	1,276	100	964	76	139	11	163	13	10	1
All ST	0	0	0	0	0	0	0	0	0	0
All OBC	242	100	210	87	15	6	12	5	5	2
All Other	2,965	100	2,534	85	193	7	187	6	51	2
Total	4,483	100	3,708	83	347	8	362	8	66	1

Source: Unicef Survey, 1999–2000.

Notes: M = Male; F = Female.

Table 7.10 shows that in both rural and urban areas, children from advanced castes had relatively higher attendance levels compared to children from backward castes. In the rural sample, nearly 79 per cent of children from the 'other category' were in school, compared to 72 per cent of the total of SC and 67 per cent of total ST children. Surprisingly, a great majority of Other Backward Classes (OBC) were in school (92 per cent). The attendance level in the urban sample followed the same trend.

According to our survey results, the dropout and never-enrolled levels in both rural and urban areas were higher among children from the backward castes. In the rural sample, the highest percentage of dropout children was found among the ST children. Nearly 13 per cent of total ST children dropped out of school compared to 8 per cent of SC children and 5 per cent of children from the advanced castes. In the urban sample, 11 per cent of SC children dropped out, compared to 7 per cent of children from the advanced castes.

The dropout levels were higher in urban areas than in rural areas. In comparison with children from the advanced castes, children from the backward castes had more limited access to school enrolment. In the rural sample, nearly 19 per cent of SC and ST children were never enrolled compared to 14 per cent of total children from the advanced castes, and surprisingly only 3 per cent from the OBC. In the urban areas the percent of never-enrolled children was 13 per cent of total of SC children compared to 6 per cent of total children from the advanced castes.

Among all backward castes, girls seem to be more discriminated against. This is reflected in the lower levels of attendance, and the higher levels of dropout and never-enrolled status for girls than for boys. In the urban areas, the gender differences in the backward castes were smaller. There were only 6 percentage points of difference in school attendance between the SC boys (78 per cent) and girls (72 per cent). Regarding dropout levels, there was only 1 percentage point of difference between SC boys and girls. Finally, the gender difference in the advanced castes was very small for both rural and urban areas.

The Role of the Private Sector

The majority of children in West Bengal were enrolled in government schools with 78 per cent at the primary level and 58 per cent

in upper primary schools. The remaining shares were distributed among private aided schools (18 per cent) and private unaided schools (4 per cent) at the primary level. At the upper primary level, 40 per cent of children were enrolled in private aided schools while only 2 per cent were enrolled in the private unaided. The presence of private aided schools in secondary education is important. According to the NSSO (1999), 47 per cent of enrolled students (1995–96) at the secondary and high school level were in private aided schools. The remaining percentage was enrolled mostly in government schools. As can be noted, the higher the level of education, the higher the enrolment in private aided schools (Panchamukhi and Mehrotra, 2005).

Table 7.11
Enrolment of Children in Different Schools, by Location

Management	Rural		Urban	
	Total	%	Total	%
Government	9,690	100	17,464	95
Private Aided	0	0	399	2
Private Unaided	0	0	489	3
Total	9,690	100	18,352	100

Source: Unicef Survey, 1999–2000.

As depicted in Table 7.11, all children in rural areas tend to go to government schools. Yet, the percentage falls slightly in urban areas, where more children are distributed also among private aided (2 per cent) and unaided schools (3 per cent). Also, a higher proportion of lower-caste children were in government-managed schools compared to 'other' advanced castes. For example, 99 per cent of SC, and all ST and OBC children were in government schools. The children of advanced castes were also predominantly enrolled in government schools, although they were also distributed among private aided (2 per cent) and unaided schools (2 per cent) (Table 7.12).

Regarding physical facilities, the majority of the school buildings under all types of management were *pucca* or semi-*pucca* especially in urban areas. However, a quarter of government school buildings in rural areas and 16 per cent of government school buildings in urban areas were *kutchha*—none of the private unaided schools were in *kutchha* buildings.

Table 7.12
Enrolment of Children in Different Schools, by Caste (%)

<i>Management</i>	<i>SC</i>	<i>ST</i>	<i>OBC</i>	<i>Others</i>	<i>Total</i>
Government	99.3	100	100	96.3	96
Private Aided	0.7	0	0	1.6	1
Private Unaided	0	0	0	2.1	1
Total	100	100	100	100	100

Source: Unicef Survey, 1999–2000.

Another indicator of infrastructure quality in schools is the availability of drinking water facilities. Near 17 per cent of schools in rural areas were deprived of drinking water facilities—all of them government schools. More (26 per cent) government schools in urban areas were without drinking water facilities than in rural areas. Private aided and unaided schools both in rural and urban areas did not have this problem.

Another problem in rural schools was the lack of toilet facilities. Only 14 per cent of rural government schools had a toilet facility for staff. Indeed, one aspect that has kept female teachers from working in rural areas was the lack of basic infrastructure. It was very common among government rural schools to find common toilet facilities (38 per cent had common facilities), unlike the private schools where separate toilet facilities for girls and boys were common.

Although, as mentioned above, the number of single-teacher schools is high in the state, the sample did not provide many such cases. Just two cases were found which were government schools located in the urban area. Nonetheless, the teacher–pupil ratio in government schools was very high in comparison with other states and more serious in rural areas.¹⁰ There was one teacher per 55 students in rural areas in government schools, compared to 34 in the urban areas. For private aided schools, the ratio was even higher at 57. As expected, the lowest teacher–student ratio (29) was found among the private unaided schools.

A positive aspect of government schools was the fairly good training and experience level of teachers in comparison with teachers in private schools. Only 16 per cent of government school teachers were untrained compared to 88 per cent of teachers in private unaided schools and 86 per cent in private aided in both urban and rural areas.

As in most other states of the country, the average salary of a teacher in private unaided schools was much lower than the average salary of a government teacher. While the average annual gross salary for urban government schools was Rs 89,350, the annual gross salary for private aided school teachers was Rs 54,552, and it was Rs 6,698 for private unaided school teachers. Among government school teachers, urban teachers received a higher average salary than rural teachers (annual gross salary in rural areas was Rs 65,825).

Overall, the financial burden on households for children attending private schools (aided and unaided) was much higher than for children attending government schools. Government school costs were much higher in urban than in rural areas. On the contrary, costs for private schools in rural areas were higher than in urban areas. For example, the annual cost per child in rural areas was extremely high at Rs 4,725 compared to Rs 2,686 in urban areas (Table 7.13).

Table 7.13
Annual Household Expenditure on Elementary Education (Rs/child)

	<i>Urban</i>	<i>Rural</i>
Government	1,568	961
Private Aided	2,686	4,725
Private Unaided	2,816	0

Source: Unicef Survey, 1999–2000.

Clearly, the challenge of universalising elementary education in West Bengal remains a serious one. The issue is: how are government commitments reflected in its spending pattern?

Government Expenditure on Elementary Education

Since 1977, the education system in West Bengal has been changing structurally, moving away in several ways from the structure inherited from the British rule. Decentralisation at all levels in the education sector has become a stated goal. The priority of education has perceptibly risen in recent years and the importance of universalisation of education at the elementary level is now the accepted goal as in the other states, though primary education is

given first priority. Yet, due to the instability of the Indian and the state economy, a clearly consistent pattern of allocation of funds reflecting the new urgency towards education has been interrupted. The following analysis is primarily based on data from the Government of India Analysis of Budgeted Expenditure on Education for the most recent years.

The share of expenditure devoted to education is very small compared to other states.¹¹ There has been an increasing yet irregular trend in the expenditure on education as a share of the State Domestic Product (SDP) over the last two decades (Table 7.14). Similarly, the percentage of the SDP devoted to elementary education remains in the range of 1–1.5 per cent, and shows an irregular trend.

Table 7.14
Expenditure on Education and Elementary Education
as % of Net State Domestic Product (NSDP)

<i>Year</i>	<i>Education (including training) Expenditure as % of NSDP</i>	<i>Elementary Education Expenditure as % of NSDP</i>
1980–81	3.01	1.06
1985–86	3.62	1.35
1990–91	4.67	1.54
1991–92	3.87	1.32
1992–93	3.50	1.21
1993–94	3.70	1.28
1994–95	3.68	1.14
1995–96	3.27	1.06
1996–97	3.77	1.09
1997–98	3.89	1.03
1998–99	NA	NA
1999–2000	4.55	0.99
2000–01	3.33	1.04

Sources: Reserve Bank of India, 2002–03; also see *sources*, table 7.15.

Note: NA—Net SDP estimates not available from given sources.

The per student expenditure on elementary education has been increasing, but at a reduced rate over time (Table 7.15). Although there has been an increase even in the real per capita expenditure in the last two decades, the trend has not been regular. It is also important to note that increase in per student expenditure depends

on both public allocations and the size of enrolment. A sudden spurt in enrolment without corresponding increase in investment leads to a fall in per student expenditure. The fact remains that the per-student expenditure at elementary education level in West Bengal was the lowest among 16 major states in the country in 2000.¹² Although public spending is not the only determinant of the quality of education, the limited allocation for schooling can be a worrying indicator due to the large number of children out of school. In fact it is remarkable that all the increase in per student expenditure for elementary education after 1980 took place in the 1980s, not in the 1990s. During the 1990s per pupil expenditure actually stagnated. It was in the 1990s, in fact, that the government expanded the primary school system by creating *shishu shiksha kendras* (SSKs), rather than the regular primary school system.

Table 7.15
Per Student Expenditure at Elementary Education Level, West Bengal

<i>Year</i>	<i>Per Student Expenditure (Rs) (current prices)</i>	<i>Per Student Expenditure Real (Rs)*</i>
1980–81	95.2	95.2
1985–86	210.9	134.3
1990–91	393.1	180.32
1991–92*	332.6	142.14
1992–93	481.6	199.83
1993–94	541.6	209.92
1994–95*	467.3	163.39
1995–96*	539.8	171.91
1996–97	654.5	195.95
1997–98	722.8	204.18
1998–99	818.0	
1999–2000	1082.2	
2000–01	2722.4	

Sources: MHRD Budgetary Resources for Education, 1950–51 to 1993–94; MHRD Growth in Enrolment in School Education, 1950–51 to 1993–94; Reserve Bank of India, 2002-03; MHRD Education in India, different years; MHRD Selected Educational Statistics, different years.

Note: * The estimates for NSDP at both current and constant prices at 1980-81 prices are available from given sources only till 1997-98 and the same have been used to calculate the deflators.

West Bengal allocated 35.8 per cent of education expenditure to elementary education and 46 per cent to secondary in 1990–91.

Unlike other states, the upper primary cycle is included in secondary education in West Bengal; this is one reason why the share of secondary education is rather high relative to other states. However, relative to other states, West Bengal also has one of the highest share of secondary students enrolled in private aided schools: 51 per cent according to NSSO (50th Round) data for 1995–96. This implies that a significant share of government spending on secondary education is devoted to paying the costs of private schools that have been taken over by the government. This has the effect of squeezing the resources available for primary education.

Household Costs

To discuss the costs per type of school from the household perspective, we have put together data from the survey regarding the responding households' education expenses. The amounts spent in a given year are reported by caste and income groups and can be compared between rural and urban households. The significance of researching household investment in education cannot be overstated for the simple reason that barring the NSS data and other occasional surveys and probes, such data is not commonplace; while we generally are informed about the providers of education, little is systematically known of the receivers. Thus of the aggregate investment in education which consists of investment in the two complementary domains of the providers and the receivers of education, we come to know something of the former but almost nothing of the latter in any systematic manner.

There are several surprises in the tables with the most prominent perhaps being that the OBC do not spend less—in fact, they spend more in both rural and the urban samples—on their children's education in comparison with the 'others' category which encompasses the higher castes! Both categories spend (or are able to spend) expectedly much more than the SC households and, even more so than the ST households. The average annual OBC household spending on a child's education is found to be about Rs 1,000 in the rural sample, and about Rs 1,700 in the urban sample. The corresponding figures for the 'others' are about Rs 600 and Rs 1,586 respectively; the figures for the SCs are Rs 450 and Rs 1,460. The one figure for the STs is Rs 400 in rural areas and, as we have

previously noted, no ST children were reported. It is difficult to judge how dependable the figures are as a basis for policy decisions. The absolute quantitative terms are questionable—in particular the total absence of scheduled tribe children in the urban schools—but one has to admit that this matter needs further probing. There is nevertheless little doubt that the gap between the SC and ST households and the remaining households (including OBC as defined in West Bengal) is unacceptably large.

In discussing gender discrimination, again, there is much evidence, although somewhat intriguing. There can be no doubt that the reluctance to invest in girl children's education is almost universal (except among the richest), at least in the rural sample; but there is a positive (and surprising) side as well. Even in the relatively impoverished households (including Income Group 1, Table 7.16), the annual expenditure on the girl child's education in the rural sample is substantial (Rs 370 for the girl, Rs 532 for the boy). In fact, this evidence of family investment in education compares remarkably well with any seen in even the households of Income Group 3, where the corresponding expenditures on a girl and a boy are found to be no more than Rs 405 and Rs 526 respectively (the latter, incidentally, being less than what the lowest income group in the sample spends). This evidence confirms other recent studies, such as those by Drèze and Sen (1995; 1996).

The largest cost was for books, stationery and uniforms regardless of income group. The expenditure on uniforms was generally higher among lower income groups (1 and 2) than the higher income groups (3–6) (see Tables 7.17 and 7.18). This indicates that there is a good case for programmes of free or subsidised uniforms to the group 1 and group 2 students.

In fact, it is remarkable that in a state where per capita consumption expenditure per month was Rs 455 in rural areas, average annual expenses on elementary education per child were Rs 617, much more than a month's consumption expenditure. Similarly, in urban areas, average school expenses per child were Rs 1,534 annually, while monthly consumption expenditure was Rs 866.60 per capita—or nearly twice monthly expenditure was absorbed by school education per child. Even SC parents were spending amounts comparable to the average—which speaks volumes for the demand for schooling.

Table 7.16
Household Cost by Caste, Income and Gender (Rs per year)

<i>Caste & Income Group</i>	<i>Rural Sample</i>			<i>Urban Sample</i>		
	<i>Male Expenses</i>	<i>Female Expenses</i>	<i>Average Expenses</i>	<i>Male Expenses</i>	<i>Female Expenses</i>	<i>Average Expenses</i>
<i>Caste</i>						
SC	593.21	454.28	541.37	1,383.51	1,544.86	1,457.68
ST	398.38	402.50	399.75	0.00	0.00	0.00
OBC	1,197.62	811.77	1,004.69	2,937.50	1,342.14	1,696.67
Others	659.09	541.24	601.95	1,622.58	1,495.42	1,585.58
Average Expense	673.61	547.70	616.71	1,559.12	1,505.71	1,534.40
<i>Income Group</i>						
Below						
Rs 6,000	532.00	370.00	460.00	809.33	0.00	809.33
6,000–12,000	480.38	385.65	434.99	1,049.12	650.83	886.16
12,000–24,000	525.88	405.03	473.62	1,100.51	1,040.43	1,074.22
24,000–50,000	798.72	640.93	739.55	1,893.39	1,820.49	1,856.70
50,000–100,000	1,616.67	1,287.07	1,457.55	2,337.59	2,328.71	2,333.26
Above						
100,000	1,390.00	1,348.33	1,358.75	6,455.00	4,370.00	5,760.00
Average Expense	673.61	547.70	616.71	1,559.12	1,505.71	1,534.40

Source: Unicef Survey, 1999–2000.

Table 7.17
Rural Areas: Composition of Household Cost, by Income Group
(% of total expenditure)

<i>Item on Which Amount is Spent</i>	<i>Income Group 1 (Below 6,000)</i>	<i>Income Group 2 (6,000–12,000)</i>	<i>Income Group 3 (12,000–24,000)</i>	<i>Income Group 4 (24,000–50,000)</i>	<i>Income Group 5 (50,000–100,000)</i>	<i>Income Group 6 (Above 100,000)</i>	<i>All Income Groups Average</i>
Develop.	2.21	2.78	1.78	1.83	1.49	0.00	1.94
Books	9.82	14.91	6.19	9.03	9.94	0.00	9.90
Stationery	24.24	23.05	23.32	26.65	17.36	13.80	22.09
Uniform	12.88	10.54	7.68	7.61	7.93	7.36	8.82
Footwear	5.31	8.27	5.85	6.74	5.68	2.76	6.43
Meals	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Table 7.17 contd.)

(Table 7.17 contd.)

Item on Which Amount is Spent	Income Group 1 (Below 6,000)	Income Group 2 (6,000–12,000)	Income Group 3 (12,000–24,000)	Income Group 4 (24,000–50,000)	Income Group 5 (50,000–100,000)	Income Group 6 (Above 100,000)	All Income Groups Average
Tours, etc.	1.93	0.67	1.80	4.63	4.73	0.00	2.72
Donation	0.00	0.00	0.03	0.03	2.84	0.00	0.73
Exam	3.58	2.00	1.81	2.45	1.39	1.29	1.89
Festival	2.42	1.92	1.67	1.88	0.89	1.20	1.61
Sport	0.08	0.07	0.22	0.17	0.87	0.00	0.32
Transport	0.00	1.20	0.60	6.90	7.10	0.00	3.45
Others	37.52	34.59	49.05	32.08	39.79	73.60	40.00
Total	100	100	100	100	100	100	100

Source: Unicef Survey, 1999–2000.

Table 7.18
Urban Areas: Composition of Household Cost, by Income Group
 (% of total expenditure)

Item on Which Amount is Spent	Income Group 1 (Below 6,000)	Income Group 2 (6,000–12,000)	Income Group 3 (12,000–24,000)	Income Group 4 (24,000–50,000)	Income Group 5 (50,000–100,000)	Income Group 6 (Above 100,000)	All Income Groups Average
Develop.	0.21	6.88	6.35	12.26	7.47	25.69	9.92
Books	5.35	14.14	18.01	18.01	17.99	5.79	17.35
Stationery	8.65	24.78	23.37	18.51	14.43	11.86	19.25
Uniform	11.53	13.76	13.60	11.08	10.31	5.21	11.60
Footwear	3.50	7.21	6.44	5.82	6.51	4.83	6.04
Meals	41.19	10.44	3.59	5.38	6.48	0.00	5.42
Tours, etc.	0.00	1.56	0.35	1.27	3.00	5.79	1.47
Donation	0.00	0.22	0.49	0.68	0.74	0.00	0.59
Exam	0.74	1.57	2.01	1.92	0.89	2.78	1.77
Festival	1.65	1.14	1.48	0.91	0.58	0.58	1.00
Sport	0.00	0.24	0.56	0.15	0.15	0.08	0.26
Transport	0.00	4.98	2.97	7.48	5.08	2.89	5.59
Others	27.18	13.27	20.76	16.74	26.43	34.72	19.72
Total	100	100	100	100	100	100	100

Source: Unicef Survey, 1999–2000.

4. THE SHISHU SHIKSHA KENDRAS—AN ADEQUATE RESPONSE TO THE DEMAND FOR ELEMENTARY EDUCATION?

Sengupta and Gazdar (1996) have shown how the extensive rural land reform from the Left Front Government's coming to power

in 1977 has created the precedent for public policy initiatives in the social sector on behalf of the poor. They examined in a WIDER study the nature of the social transformation that was brought about in the West Bengal countryside in the decade following 1977 when the Left Front Government assumed power. They described fully the impact of the government's successful agrarian policy in the form of a real redistribution of income and its limited impact on social empowerment of the rural poor. They noted that in some important respects (for example, decline in rural poverty) West Bengal stands alone in its achievement among the states of eastern India and is comparatively better when compared to Bihar or Orissa, for example. However, they also state that West Bengal's political will has not extended to wider public action in the social sphere. State politics have not generated the Kerala-type public action that could have wrested and extracted from the schools and hospitals elementary education for all children and primary health for all persons, regardless of their belonging to either the public or private sector. Nor was there a clear and positive policy discrimination in favour of the girl child.

My own critique¹³ is on more pragmatic lines: my limited objective is to make a few realistic and constructive suggestions, drawing attention to the constitutional and legal compulsions. State governments face the pressures today of the 73rd and 74th Amendments (rejuvenating the *panchayati raj* institutions of local government), the judgements of the Supreme Court of India from the series of public interest litigation that occurred during the 1990s and finally, by the Constitution (86th Amendment) Act, 2002 which has finally arrived placing the Right to Education in the list of the Fundamental Rights.

West Bengal still faces the daunting task of universalising elementary education. Currently there are around 54,000 primary schools in the state with more than 150,000 teachers. However, universalising primary education itself would require substantial new investment: the state government estimates that more than 7,000 new primary schools would need to be constructed (Government of West Bengal, 2004). It is in this constitutional and legal context that I would like to examine the government's parallel approach, the Child Education Centres or *Shishu Shiksha Kendras* (SSKs).

Table 7.19
Number and Enrolment of Shishu Shiksha Kendras, West Bengal
 (as on 1 April 2004)

<i>District</i>	<i>Number</i>	<i>Enrolment</i>
<i>DPEP</i>		
Bankura	505	20,471
Birbhum	542	40,149
Dakshin Dinajpur	570	38,170
Jalpaiguri	1,135	98,449
Koch Bihar	895	4,600
Maldah	690	77,538
Murshidabad	1,620	176,333
Puruliya	350	18,164
South 24 Parganas	1,415	116,874
Uttar Dinajpur	1,055	68,583
<i>Non-DPEP</i>		
Bardhaman	1,255	108,520
Darjeeling	841	19,315
Haora	345	21,980
Hugli	310	18,194
Kolkata	395	23,426
Nadia	575	45,565
North 24 Parganas	1,020	74,358
Paschim Medinipur	2,914	126,581
Purba Medinipur	1,510	86,834
Siliguri	333	18,480
Total	17,975	1,244,584

Source: Some basic information: West Bengal Sarva Shiksha Abhiyan.

The state introduced *Shishu Shiksha Karmashuci* scheme as a 'cost-effective' community-based alternative known as Shishu Shiksha Kendra to formal schools to meet the unmet access requirements in various parts of the state. The SSKs were meant to fill the gaps created by either the absence of primary school within 1 km or by the inadequacy of physical infrastructure (number of rooms) and teachers to accommodate more children in existing schools. The SSKs do not receive infrastructure grant and are housed in space provided by local community. Started with the state's own resources, the SSK is now primarily being funded by the central assistance coming through the *Sarva Shiksha Abhiyan* (SSA). More than 1.2 million children are enrolled in about 18,000 SSKs (Table 7.19).

The SSK programme is similar to the *shiksha karmi* programme in Rajasthan and the Education Guarantee Scheme in MP (discussed elsewhere in the book). The SSK programme allows for an SSK to be set up in any village where there are 20 or more children aged 5–9 who do not access to the formal school system, with the proposal coming from the *gram sansad* (village council). The SSKs have to run for at least three hours a day for 200 days a year. There are at least two teachers (called *sahayikas*), who must be women above 35 years of age. They are appointed on an annual contractual basis at a monthly salary of only Rs 1,000, compared to the normal monthly salary of a primary school teacher in the formal system of Rs 5,000–6,000. On average 80 children are enrolled in each SSK (West Bengal HDR, 2004). In addition there are over 1,000 Madhyamik Shiksha Kendras (MSKs)—which began functioning in 2001—a started to provide upper primary facilities to those who are passing out from the SSKs.

Protagonists claim that tens of thousands of dedicated workers are prepared to teach at these salaries and that many who have already joined the SSKs are in fact teaching the normal primary level courses very adequately. They therefore strongly support this path for West Bengal's resource-starved UEE movement. However, I suspect that the market cannot possibly provide a sustainable supply of teaching services on these terms for long. As Amartya Sen (2002) has said in his introduction to the recent Pratichi Trust study on SSKs (while commending the effort): 'The reliance on SSKs should not reduce the recognition of the urgency of reforming and enhancing the main avenue of primary education, viz., primary schools'.

5. THE PRIORITIES

We have presumed in this chapter that among the operative parameters of the educational targets of West Bengal, the following are part of accepted policy of the Left Front Government and are therefore to be emphasised in all programmes aiming at educational reform in the state: (a) decentralisation down to the local government level; (b) provision of literacy including computer literacy for all to prepare children for the high-technology era; (c) provision of at least early education facility in the child's mother tongue for

all; and (d) provision of equitable distribution per child of the direct cost of education that was to be borne by the state. In addition, for all four parameters in the coming decades, the emphasis has to be on gender equality in access to regular schooling at a common minimum level, and on the pursuit of the human development objectives of education at least at the elementary stage.

The analyses of (a) the official documents including Commission and Committee Reports, (b) the occasional critiques offered by social scientists and (c) the reports of other surveys, go to confirm the proposition that West Bengal is basically prepared, both ideologically and in terms of the availability of human resources, to meet the requirements of all the four parameters that need to be addressed. At the same time, there is also evidence in this large and well-documented body of literature of a certain degree of complacency developing in the system which makes it difficult for the feedback of constructive criticism to get through. However, as we have noted above, there are several promising recent signs of reversal and serious organisational or systemic reappraisals on the part of government and also definite signs of its accordance of higher priority to primary if not elementary education, which are to be welcomed.

Attendance

Our study suggests that West Bengal should urgently appoint a task force to form measures for increasing the intake of tribal students in West Bengal schools located particularly in the urban sector. Increased attention should also focus on increasing the ratio of girl students to boys in the scheduled caste and the scheduled tribe student groups.

Household Expenditure

The results were not entirely unexpected as one found gender-discriminative practices in the case of the girl child, SC and ST children. On the other hand, a trend of increasing expenditures by the households is seen to be positive. There also may be *two* minor positive shifts among the households in West Bengal when looking at them as a whole: One shift is *pro*-school education; the

other is *pro*-girl child. Both are mild shifts, as the tables show, for many children do not go to school at all, and when they do, parents still spend more on the boy child.

Also significant is that the OBC do not spend less on their children's school education, and that expenditures for girls are substantial, even if smaller, than expenditures for boys.

Openness of Action under Constitutional Provisions

One may also observe the Government of West Bengal's submission before the Supreme Court whereby the governments were to submit information to the Court concerning the 'areas of energisation'. It is surprising that the eight areas of 'energisation' agreed upon before the Supreme Court are not mentioned in the Department of School Education's official reports! One of the agreed areas also previously mentioned (converting all single-teacher schools into dual teacher primary schools) was not given any publicity, and its questionable implementation was not reported. This habit of not recognising delays in delivery is counterproductive in the end, often forgotten. Government should keep track of all the eight areas of energisation agreed upon before the Supreme Court of India and remain fully posted of ongoing progress.

Scrutiny of Policy Statements

A paragraph stated in the Department of School Education's Annual Report (1997-98) has created fear that a well-meaning government harassed for funds might be hesitant to accept the full financial impact of the Fundamental Right to Education. A shortened version of the paragraph is reproduced:

...children who should attend the primary school fail to enrol themselves because of certain social, cultural or any other form of barriers. In order to bring these children into the field of education 'Child Education Centres' have been set up in different districts. ...the children will be provided education by *Siksha Sahayika* (para-teacher). These para-teachers will be provided with an honorarium of Rs. 800/- per month. ... Last year 1000 such centres were sanctioned in various districts... (Government of West Bengal 1998: 20).

Will it satisfy the Supreme Court's requirement of maintaining the children's fundamental right to free and compulsory education? Will it pass the test of 'progress in the eight areas of energisation' by the highest judiciary of the land?

Contrariwise, it is important to note that West Bengal has not gone for para-teachers in formal schools so far. Even now the proposal stays only as a proposal so far as the regular schools are concerned.

This motivates one final suggestion: the Department of School Education must be constantly vigilant in its public interactions and regularly review all public feedback on EFA in an empowered standing committee of the department. It should store all records of public interest litigation concerning the Fundamental Right to Education and all undertakings given by the state government to the Supreme Court of India in this respect. Immediate attention should be given at the same time to the follow-up requirements of the Constitution (86th Amendment) Act 2002 which is finally in place.

APPENDIX 7A-1

WEST BENGAL SURVEY METHODOLOGY

This chapter is the outcome of a Unicef sponsored cost and finance study of elementary schooling in eight selected states of India. A sample field survey was carried out in November, 1999.

The four districts chosen for study are listed by their names as found in the Registrar General's Primary Census Abstract 1991 (PCA) and appear in Table 7A.1. For the selection of villages in each district, the villages were grouped into three sub-samples of either large, medium or small populations as given by the district-wise Primary Census Abstract. Villages of less than 100 households were discarded. In selecting three villages from each sub-sample, a total of nine villages were selected from each district. Table 7A.2 shows the villages selected.

For the urban samples, the listing procedure was similar, but implicit weighting was given to population size: the urban areas (towns and cities) were divided into four census categories according to the numerical size of the population (see Table 7A.3).

Table 7A.1
The Sample Districts

<i>State/Sample District</i>	<i>Population 1991 Census</i>	<i>% of State Population</i>
Bardhaman (Burdwan)	6,050,605	8.9
North 24-Parganas	7,281,881	10.7
Medinipur (Midnapur)	8,331,912	12.2
Murshidabad	4,740,149	7.0
Total for 4 Sample Districts	26,404,547	38.8

Source: Government of West Bengal, 1998.

Table 7A.2
Four Districts with 30 Blocks Containing 36 Sample Villages

<i>Sample Districts</i> <i>(01-04)</i>	<i>Sample Blocks</i>	<i>Sample Villages</i> <i>(nine per district)</i>	<i>Remarks</i>
District 01 Burdwan	Ansgram I	Nagargachi	Focus group discussions (FGDs) were held with the respondents in all nine villages.
	Kalna I	Dharsona	
	Mangolkote	Itta	
	Ansgram II	Kunda	
	Galsi II	Amdiha	
	Ketugram II	Jharubati	
	Kalna II	Charki	
	Barabani	Bhedia	
District 02 24-Parganas (North)	Bongaon	Aushgram	FGDs held with the respondents in six villages.
	Gaigatha	Dakshin Kanakpur	
	Bagda	Palashi	
	Swarupnagar	Kripalpurkapur	
	Basirhat II	Madhusudankati	
	Barrackpur	Parui	
		Sarparajpur Gobarda	
		Srikrishnapur	
District 03 Midnapur	Binipur II	Tentulberia	FGDs held with the respondents in six villages.
	Keshpur	Unai	
	Egra II	Barasukhjora	
	Palashpur I	Dhunsai	
	Nandigram I	Ghora Thakura	
	Dantan II	Mohammadpur	
	Bhagwanpur II	Narayan Chak	
	Tamluk II	Nasra	
District 04 Murshidabad	Nayagram	Panchuria	FGDs were held with the
	Nabagram	Ram Chak Sham Chak	
	Burwan	Saharda	
		Begampur	
		Dalua	

(Table 7A.2 contd.)

(Table 7A.2 contd.)

Sample Districts (01-04)	Sample Blocks	Sample Villages (nine per district)	Remarks
	Bharatpur II	Dhursunda	respondents in all nine villages.
	Ranigar I	Itasaran	
	Beldanga I	Mominabad	
	Kharagram	Nalkanda	
	Noada	P. Srikikrishnapur Sakua Satitara	

Source: Unicef Survey, 1999-2000.

Table 7A.3
Urban Samples: Four Population Categories

Category of Urban Area (according to the NSS population norms)	The Sample Towns and Cities
Category 1 (below 50,000)	Gopalpur, Palasbari, Patulia, Mandarboni
Category 2 (50,000 to 199,999)	Birnagar, Bolpur, Chinsurah, Halisahar
Category 3 (200,000 to 999,999)	Durgapur
Category 4 (1,000,000 and above)	Kolkata

Source: Unicef Survey, 1999-2000.

Notes

1. The author would like to thank, subject to the usual disclaimers: Amartya Sen for introducing me to the Pratichi Trust researches; Asim Dasgupta for a most helpful conversation on the state of education in WB. India Country Office, Unicef, New Delhi; Santosh Mehrotra for having inspired this study in the first place and help in editing, abridging and updating it for publication; Carrie Auer, Unicef, Kolkata for coordinating the original eight-state study; the late Sunil Sengupta: indefatigable critic and supporter of the Left Front to whose memory this paper is dedicated; Jyotsna Jha for urgent help in updating the tables and analyses for this volume.
2. The other two are the West Bengal Council of Higher Secondary Education and West Bengal Board of Madrasah Education.
3. There are also 13 additional district inspectors. Below the district level there are 106 subdivisions, with each controlled by an assistant inspector of schools. The 689 circle offices below this are the lowest level of administrative units in the directorate. Each circle office is headed by a sub-inspector of schools, who supervises and controls the primary schools under the jurisdiction of the circle.
4. The NSS 42nd Round found in 1987 that families in all income segments were allocating significant amounts for expenses on children's education (NSSO, 1988).

5. In no other state has the issue of assessing the quality, in terms of learning levels, of the child's school education been examined more enthusiastically and competently than in West Bengal. The statistical methodology of testing the level of learning in West Bengal primary schools has evolved satisfactorily primarily due to several important studies that were carried out by groups of young social scientists and statisticians of Kolkata in the late 1980s and early 1990s. One of the initial reports was Basumallik et al. (1992). This was the first report on a four-year (1986–90) project concerning the minimum learning of Bengali and mathematics in primary classes. A sophisticated statistical model was used for this analysis and the work was done by the psychometric unit of the Indian Statistical Institute. A similar study assessing again Bengali and mathematics was done by the SCERT on behalf of the NCERT (Ray, 1997). Another noteworthy study was by Roy, et al. (1995). Our objective is not to examine quality in these terms.
6. Operation Blackboard (OB) was launched in 1987–88. OB provided for 100 per cent central assistance to the states, going towards the salary of a second teacher in *every* single-teacher school in the country. However, serious criticisms of OB implementation exist.
7. The so-called 'areas of energisation', with respect to protecting the Fundamental Right to Education as defined by the Supreme Court of India (1993), in the judgement on the writ petition of J.P. Unnikrishnan and others against the State of Andhra, that were agreed upon by the union and state governments are as follows:
 - i. establishment of primary schools in every revenue village;
 - ii. upgrading primary schools to the upper primary level by lowering the present 4:1 ratio;
 - iii. provision of free textbooks in all government (including local body) and aided primary schools;
 - iv. converting all single-teacher schools into dual-teacher primary schools as envisaged by Operation Blackboard;
 - v. enacting of compulsory education laws by states that had still not legislated such laws;
 - vi. devolution of power to the panchayati raj institutions as envisaged in the 73rd and 74th Amendments to the Constitution of India;
 - vii. operationalise District Institute of Educational Training in the states for the training of elementary school teachers which was sanctioned under the Seventh and Eighth Five-Year Plans;
 - viii. introduction of Minimum Levels of Learning (MLL) at the primary level.
8. The five districts in which half of the tribal population are concentrated are: Medinipur, Purulia, Burdwan, Bankura and Birbhum. Of these, Burdwan and Mednipur are two of the four sample districts for the present Unicef study.
9. The number of ST boys is only 292 out of a total of 7,949, which is less than 3.7 per cent. For comparison, the tribal population accounts for over 6 per cent of Burdwan's total population and over 8 per cent of Mednipur!
10. It must be noted that teacher–pupil ratios are calculated on the basis of the registered enrolment figures, which are generally inflated.

11. During 1995–2000, Assam devoted 5.8 per cent of SDP to education, Bihar, 5.4 per cent, and Rajasthan, 4.7 per cent.
12. According to the *Analysis of Budgeted Expenditure on Education, 1998–1999 to 2000 to 2001*, the per capita expenditure was highest at Himachal Pradesh (Rs 4569.8) and the lowest in West Bengal (Rs 1082.2) in 2000.
13. This and the following paragraph give the gist of a lecture given at the international seminar of the Pratichi Trust on the West Bengal experiment, at Kolkata on 4 January 2002, at the invitation of Amartya Sen. I enjoyed there the frank and illuminating conversation with my old student Asim Dasgupta. He had explained to the participants at the seminar the West Bengal position from his personal viewpoint (not as the West Bengal finance minister).

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8

Private Costs and Public Financing of Elementary Education in a High-Achiever State: Tamil Nadu

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1. INTRODUCTION

Some states in India have made rapid progress in elementary educating though no state has completed the task of achieving Universal Elementary Education (UEE). While states like Kerala, Himachal Pradesh (HP), Maharashtra and Tamil Nadu (TN) have progressed significantly in education, as many as 10 major states in India are still educationally backward. Tamil Nadu is one of the educationally advanced states with rates of literacy, enrolment and other indicators of education development above the national averages. The relative position of the state in terms of education development has been consistently high. Hence, a critical examination of the education situation in Tamil Nadu, and of policies and practice relating to education development would be useful for further development of education in this as well as other states. However, this is not the scope of the present chapter. It makes only limited reference to the factors that account for its relatively greater progress in elementary education. The results of the National Family Health Survey 1998-99 show that the median number of years of schooling for Tamil Nadu was 6.4 years, as against the

* The able research and statistical assistance provided by A.N. Reddy and Geetha Rani in updating the secondary database is gratefully acknowledged.

all-India figure of 5.5 years, which is a close third to Kerala (8.1) and Maharashtra (7.1).

The chapter is deliberately confined to an examination of a few select issues and problems relating to the costs and financing of elementary education (primary and upper primary) in the state. Since finances form a major policy instrument of the government, a critical examination of the finances and other related issues of education can provide valuable insights into several aspects relating to education development. Section 2 gives a brief account of the elementary education situation in the state drawing upon the Unicef survey (1999). Section 3 focuses on the role of private sector in elementary education. Section 4 concentrates on public expenditure on education, and Section 5 presents estimates on household costs of education. The chapter ends with a brief outline of policy implications.

2. UNIVERSALISATION OF ELEMENTARY EDUCATION

In line with the constitutional mandate, the Government of Tamil Nadu is committed to the task of providing universal elementary education for all children up to the age of 14 years. UEE includes:

- enrolment of all children 6–14 years in the primary and upper primary school system;
- retention of children in schools until they complete at least the elementary education cycle; and
- quality of education with reference to attainment in basic language and mathematical skills.

Elementary education has expanded fast in the state from 8.2 million enrolled in 1980–81 to 10.3 million in 1998–99, with an annual rate of growth of 1.6 per cent. Since primary education is nearly universal, growth in enrolments was only 0.7 per cent per annum. The rate of growth for upper primary levels is rather high at 4.1 per cent. The major growth took place during the 1980s as the enrolment in primary education increased at a rate of growth of 2.3 per cent, 5.9 per cent in upper primary education, and 3.2 per cent totally. During the 1990s, the overall rate of growth was, in fact, negative. Only enrolments in upper primary education

made the rate of growth positive at 1.5 per cent. This was however mostly due to declining growth in child population—itsself the result of the lowest total fertility rate (2.0) in the country for any state (except Kerala). The decline in the numbers of children at primary level means that in future years any additional public expenditure can help improve the quality of schooling.

According to the statistics on Gross Enrolment Ratios (GER), primary education is universal with a ratio above 100 per cent, and upper primary education is nearly universal with a ratio above 90 per cent. However given the general weaknesses of GER as a reliable measure, one can look at alternative enrolment rates, for example those estimated by the NSSO (1998). The NSSO gives a set of estimates on the gross attendance rate, age-specific attendance ratio and net attendance ratio.¹ The age-specific attendance rate may be a better indicator than the others. The age-specific attendance rates were reasonably high in the state: 91 per cent in the lower age group (6–10) and 74 per cent among the children of the age group 11–13.

While these figures represent a high level of development, they also reflect the unfinished task of universal enrolment. Nearly 10 per cent of the children of the age group 6–10 and 25 per cent in the age group 11–13 were not going to school. Similarly, still only two-thirds of the children enrolled in grade I complete the upper primary stage.

In fact, the Unicef survey, carried out in the academic year 1999–2000, shows that there has been increase in both GER as well as Net Enrolment Ratio (NER) compared to 1995–6 (NSSO estimate in Table 8.1). For primary level, the rural GER has gone up from 98 to 108.7, and the urban rate from 99 to 110.2. For the upper primary level, it increasingly appears that universalisation of upper primary level is on its way: in the rural areas, for boys, GER went up from 84 to 90, and for girls from 71 to 79.4. In urban areas, boys' GER rose from 90 to 100.9, and for girls from 80 to 97.7.

Similarly, the NERs in Tamil Nadu are much higher than in any state under study in this book. At primary level, rural NERs rose from 87 to 88.4, but much more for girls from 79 to 86.6. In urban areas, NERs rose from 85 to 91.4 for boys, and from 86 to 88.4 for girls. At upper primary level, NERs also rose: in rural areas from 61 to 63.9 for boys, and from 56 to 60 for girls; in urban

areas they showed a higher rise, from 67 to 77 for boys and from 67 to 75 for girls.

Table 8.1
Attendance Rates (%) in Education, 1995–96

	<i>Gross Attendance Rate</i>		<i>Age-specific Attendance Ratio</i>		<i>Net Attendance Ratio</i>	
	<i>Grades</i>		<i>Age Group</i>		<i>Grades</i>	
	1–5	6–8	6–10	11–13	1–5	6–8
Rural						
Boys	104	84	94	77	87	61
Girls	92	71	85	64	79	56
All	98	77	90	71	83	58
Urban						
Boys	100	90	92	82	85	67
Girls	99	80	93	81	86	67
All	99	85	93	82	86	67
Rural + Urban	98	80	91	74	84	61

Source: NSSO (1998).

The Unicef survey also shows that attendance rate on the day of (unannounced) visit by the survey team was among the highest for all the states examined in this book. Thus as per head count, 92 per cent of children enrolled were actually present in rural areas, and 93.5 per cent of children were present in urban areas. Tamil Nadu also had the lowest rate (7 per cent) of never-enrolled children of any of the states examined, both among 6–10 and 11–13 year olds. However, it does not seem that in Tamil Nadu the system dropout rate was any lower compared to other states, regardless of whether one considers the 6–10 or 11–13 year olds; this is true for rural as well as urban areas (Srivastava, 2005).

Parental Perceptions Regarding Enrolment, Non-enrolment and Dropping Out

Based on the Unicef survey conducted in the state,² parental perceptions are analysed as to why their children never enrolled or dropped out. The issue of why parents send their children to schools should however be first examined.

As shown in Table 8.2, nearly three-fourths of the parents observed that they send children to school to get a better job or to

ensure a better standard of living. It is not true that parents send their children to schools to pass time. They value education.

Table 8.2
Parental Perceptions on Reasons for Sending Children to Primary or Upper Primary Schools (% agree)

<i>Reason</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
To Pass Time	6.3	6.6	3.9	4.9
To Get a Job	40.9	25.0	50.0	36.4
To Form Character	10.8	15.1	3.3	7.7
To Ensure Better Living Standard	36.4	48.7	34.4	43.4
Others	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

Source: Unicef Survey, 1999–2000.

Parents also reported in rural areas that they would prefer sending their children to school if: (a) they were given monetary and other incentives, (b) schools were nearer to their homes and (c) schools were equipped with better teachers, buildings and other facilities. In urban areas, parents expected primarily monetary and other incentives for sending their children to school (Table 8.3).

Table 8.3
Factors that could Encourage Parents to Send Children Who were Never Enrolled or Dropped Out to School (% agree)

<i>Reason</i>	<i>Rural</i>	<i>Urban</i>
School Nearer to House	71.7	21.4
School Timing Change	19.7	13.5
Monetary Incentives	80.9	56.4
Other Incentives	76.0	30.2
Better Teachers	73.7	20.6
Better School Building	71.1	20.6
Good Facilities	71.4	22.2
Others	4.6	2.4

Source: Unicef Survey, 1999–2000.

While several strategies have been adopted in this context, we analyse here public expenditure on education, as public expenditure should reflect various government efforts to improve the educational situation in the state.

3. PRIVATE SECTOR IN ELEMENTARY EDUCATION

Private schools are managed by private bodies, but not necessarily wholly funded by private bodies. They can be completely privately funded, or can also receive state funds in varying amounts. Very often in the literature, this distinction is not taken into account due to data constraints, and schools are labelled as being private. This distinction is very important, as the features associated with private institutions that are managed and financed by private sources are quite different from the private institutions managed privately but with state funding. Private institutions managed and financed by private sources represent a form of 'pure' privatisation, while the other is 'pseudo privatisation' as schools are up to 95 per cent state funded. Here they are referred to as private unaided and private aided institutions respectively.

There are a large number of private schools in Tamil Nadu. Private schools account for 17 per cent of the total primary schools and 34 per cent of upper primary schools in the state (Table 8.4). Of the total number of primary and upper primary schools, the private sector accounts for nearly 20 per cent. In terms of enrolment, the private sector accommodates almost 31 per cent of all children at elementary level, and provides employment to 33 per cent of the total elementary school teachers in the state: nearly 20 per cent of schools serve 31 per cent of students.

These numbers on private schools include government-aided private schools and also private unaided schools. A substantial proportion of the private schools could be those that are financially supported by the government. For instance, the data available from the Sixth All-India Educational Survey (NCERT, 1998) shows that in 1993, nearly 30 per cent of primary school students in Tamil Nadu were enrolled in private aided schools and only 3 per cent in unaided schools. Private unaided schools constituted just 0.3 per cent of the total number of primary schools.

Interestingly, if one compares the 1993 data of the Sixth All-India Educational Survey and the state data referring to 1997-98, one notices that although the number of private primary schools increased marginally, the number of students in private schools declined drastically. Similar trends occurred in upper primary schools as well.

Table 8.4
Elementary Education by Management

	<i>Primary</i>		<i>Upper primary</i>		<i>Elementary</i>	
	No.	%	No.	%	No.	%
Schools, 1997–98						
Government	1,496	4.9	214	3.9	1,710	4.7
Municipal	1,153	3.7	399	7.3	1,552	4.3
Panchayat	22,998	74.7	2,984	54.5	25,982	71.6
Private	5,149	16.7	1,876	34.3	7,025	19.4
Total	30,796	100.0	5,473	100.0	36,269	100.0
Schools, 2001–02						
Government	24,365	77.4	3,512	60.5	27,877	74.7
Municipal	1,942	6.2	346	6.0	2,288	6.1
Panchayat	5,075	16.1	1,894	32.6	6,969	18.7
Private	106	0.3	57	1.0	163	0.4
Total	31,488	100.0	5,809	100.0	37,297	100.0
Enrolment (million), 1997–98						
Government	0.3	6.5	0.1	4.9	0.4	5.9
Municipal	0.6	11.8	0.3	10.1	0.8	11.2
Panchayat	2.6	55.6	1.2	45.3	3.7	51.9
Private	1.2	26.1	1.0	39.7	2.2	31.0
Total	4.6	100.0	2.6	100.0	7.2	100.0
Teachers, 1997–98						
Government	7,749	6.7	3,388	5.3	11,137	6.2
Municipal	8,950	7.7	6,895	10.7	15,845	8.8
Panchayat	68,856	59.5	25,760	40.0	94,616	52.5
Private	30,096	26.0	28,402	44.1	58,498	32.5
Total	115,651	100.0	64,445	100.0	180,096	100.0

Source: Government of Tamil Nadu (1999a) and MHRD(b) (2001–02).

Government schools are enrolling a major proportion of children in both rural and urban areas in Tamil Nadu. However, NSSO data for 1995–96 clearly shows that while 75 per cent of enrolled children were in government schools at primary level, and 78 per cent at upper primary level, the share of private aided schools in total enrolment is one of the largest for Tamil Nadu compared to any of the major states of India: 17.7 per cent at primary and 21.8 at upper primary level.³ At the same time, the share of children enrolled in private unaided schools is quite low: 7.5 per cent at primary and 5.9 per cent at upper primary level.⁴

Performance of Private Schools

The Unicef survey reveals that at least in the surveyed districts in Tamil Nadu, private unaided schools are non-existent in rural areas, and also account for barely 4.6 per cent of total enrolment in urban areas at elementary level. This is quite different from the situation in all the other states examined in this book.

For the urban areas, there is an interesting contrast between government and private unaided schools, according to Unicef survey data. Only 27 per cent of government schools are in *pucca* buildings, but 40 per cent of private unaided ones are *pucca*. Only a third of government schools have piped drinking water available in the school, while three-fourths of the private unaided ones do. Four-fifths of private unaided schools have a toilet facility for girls, but under a fourth of government schools do; all private unaided schools have a toilet for staff, but only a fifth of government schools do.

The student-teacher ratio in private unaided schools is 24, but 33 in government schools. However, 17 per cent of private unaided school teachers are untrained, but almost none of the government school teachers is untrained. But the number of working days in the year is higher in private unaided schools (192 per year) than in government schools (178). And the dropout rate in private unaided schools is 8 per cent compared to 40 per cent in government schools.

Table 8.5 provides details of perceptions of parents of school children concerning the functioning and teaching aspects of various school types. In urban areas, all parents (100 per cent in the survey) who sent their children to private *unaided* schools expressed the view that the schools were functioning, and teaching was either 'good' or 'satisfactory'. About 40 per cent of parents were 'not satisfied' with the functioning and teaching in the local body schools. Regarding private *aided* schools in rural areas, only about 8 per cent of parents were not happy with the teaching and functioning; in urban areas, all parents expressed their contentment ('good' or 'satisfactory'). Nearly 86 per cent in urban areas observed that both the teaching in and functioning of government schools was satisfactory. This is consistent with the finding that a very small proportion of children are in private unaided schools. At the same time, the share of parents in urban areas who felt that teaching and functioning of the school was 'good' was higher for private unaided schools than for government schools.

Table 8.5
Parents' Perceptions on Teaching and School Functioning (%)

Type of School	Rural			Urban		
	Satisfactory	Good	Not Satisfied	Satisfactory	Good	Not Satisfied
About Teaching in School						
Government	61.0	28.8	10.3	85.5	14.1	2.4
Private Aided	59.3	35.2	8.5	75.8	24.2	0.0
Private Unaided				72.0	28.0	0.0
About Functioning						
Government	56.3	27.8	16.0	85.9	12.9	1.2
Private Aided	58.6	34.5	6.9	75.8	24.2	0.0
Private Unaided				74.0	26.0	0.0

Source: Unicef Survey, 1999–2000.

State Support to Private Schools

About 30 per cent of the total government expenditure on elementary education goes to private aided schools in the form of aid or grants (Table 8.6). It is interesting to note that private aided schools are about 30 per cent of all schools and the enrolments are also about 30 per cent of the total enrolment. All this shows a fair distribution of resources in the state, unlike in a few other states, where private aided schools form a small fraction of total number of schools, but account for a huge proportion of the total public expenditure on elementary education. This has led in some states to a phenomenon described as 'private enrichment and public pauperisation' (Tilak, 1994c).

Since the private aided sector relies upon state finances, the financial contribution of these schools could be regarded as negligible. Private unaided schools do provide some financial relief to the government. However, two aspects are key: first, the private unaided sector is rather small. This is particularly so due to the number of unrecognised schools and unavailable data. Second, private management does not necessarily contribute to the education finances on their own, and they mostly depend upon 'student fees'. The idea of financing elementary education with these fees is questionable. We do not have any data here on the fees collected by these schools or on other methods adopted in the development of schools. It is well known that many schools not only recover costs through fees, but also make handsome profits.

Table 8.6
Government Assistance to Private Elementary Schools

<i>Year</i>	<i>Rs in Million</i>	<i>% of Total Government Expenditure on Elementary Education</i>
1992-93	2,265.5	29.21
1993-94	2,558.1	31.63
1994-95	2,848.8	32.12
1995-96	3,162.3	31.71
1996-97	3,700.2	31.9
1997-98	4,040.3	29.9
1998-99	5,637.2	30.8
1999-2000	6,057.0	30.9
2000-01	5,915.4	31.5
2001-02	5,909.7	32.0
2002-03 (RE)	6,282.3	32.8
2003-04 (BE)	6,644.2	31.0

Source: MHRDa, various years.

Note: RE = revised estimates; BE = budget estimates.

Since private aided schools provide insignificant financial relief to the government, and private unaided schools are small in number, the total financial contribution of the private sector to financing elementary education cannot be sizeable. The government must bear the cost of establishing and running elementary education as per the Constitutional Directive relating to compulsory, free elementary education. Children from well-to-do families opt for unaided primary and upper primary schools, whereas children from disadvantaged parents are enrolled in government schools.

4. EXPENDITURE ON EDUCATION

Expenditure on education consists of public expenditure incurred by the central and state governments, and private expenditure by both private sector investments in education and by the households. Each is examined in turn in this chapter.

Trends in Public Expenditure on Education

Public expenditure on education has increased remarkably in the state of Tamil Nadu during the post-independence period,

particularly since the formation of the state in the present form. The total expenditure on education in 1961–62 was Rs 387 million, which increased to a level of about Rs 47,724 million in 2003–04 (budget estimates). The 123-fold increase during this period is quite impressive, although it is in current prices. In real terms,⁵ the increase is not as high at 6.5 per cent per annum⁶ between 1980–81 and 2001–02 (Table 8.7).

Table 8.7
Expenditure on Education by Plan and Non-plan Account
(Rs in millions)

Year	In Current Prices			In 1993–94 Prices		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1980–81	206	2,145	2,351	649	6,763	7,412
1981–82	247	2,395	2,643	716	6,944	7,663
1982–83	406	2,978	3,383	1,092	8,012	9,102
1983–84	315	3,396	3,710	773	8,337	9,108
1984–85	461	3,885	4,346	1,083	9,128	10,211
1985–86	516	4,740	5,256	1,108	10,176	11,284
1986–87	551	4,753	5,304	1,050	9,059	10,110
1987–88	703	6,070	6,773	1,207	10,418	11,624
1988–89	749	6,938	7,687	1,238	11,469	12,707
1989–90	992	9,438	10,430	1,499	14,263	15,762
1990–91	629	11,990	12,619	883	16,838	17,721
1991–92	634	13,675	14,309	777	16,767	17,544
1992–93	643	14,746	15,389	714	16,365	17,079
1993–94	767	16,333	17,100	767	16,333	17,100
1994–95	954	17,747	18,701	900	16,733	17,633
1995–96	1,130	20,097	21,227	967	17,206	18,173
1996–97	1,436	23,269	24,705	1,130	18,316	19,446
1997–98	1,455	26,916	28,370	1,068	19,762	20,830
1998–99	1,707	36,211	37,917	1,157	24,552	25,709
1999–2000	1,712	40,897	42,609	1,147	27,403	28,551
2000–01	1,570	41,443	43,013	1,019	26,896	27,915
2001–02	1,732	40,192	41,924	1,089	25,263	26,352
2002–03RE	1,202	42,819	44,020	–	–	–
2003–04BE	1,417	47,725	49,142	–	–	–
Annual Rate of Growth (%)						
1980–90	14.4	17.8	17.5	5.3	8.5	8.3
1990–2000	12.7	14.1	14.1	4.3	5.6	5.5
1980–2002	9.7	16.1	15.7	1.0	6.9	6.5

Source: MHRDA, various years.

Note: RE = revised estimates; BE = budget estimates; – not available.

Much of the increase in public expenditure took place during the 1980s. After the economic reforms were introduced, the rate of growth fell significantly. The rate of growth was 8.3 per cent between 1980–81 and 1989–90 and declined to 5.5 per cent between 1990–91 and 2001–02.

In most other states and in India as a whole, the plan expenditure on education forms relatively a small proportion (about 10 per cent of the total expenditure on education) while non-plan expenditure forms about 90 per cent. In Tamil Nadu, the relative share of plan expenditure has fallen drastically to about 5 per cent. While both plan and non-plan expenditures are important, plan expenditures can set new directions for development. At the same time, resource planners enjoy more freedom and can exercise more leverage with plan resources (make increases or cuts) without affecting the existing system, than with non-plan resources which are committed expenditures. For the same reason, one does not find steady growth in plan expenditures on education. Plan expenditures in real terms fell sharply in the first half of 1990s, before climbing back up again to the level of mid-1980s later in the decade. On the other hand, the growth in non-plan expenditure has been somewhat smooth.

Expenditure on Education by Various Departments

Public expenditure on education is incurred not only by the Department of Education, but also by other departments. For example, the Ministry of Defence (in the central government) runs schools such as Sainik and army schools for the children of its employees. The Ministry of Railways also runs schools. Among the several departments, those of significance for state-level spending on education include the Department of Social Welfare, Department of Tribal Welfare (on school education), Department of Health and Medicine (on medical education, including nursing and dentistry), Department of Agriculture (on agricultural education) and so on. Expenditure on school buildings under the programme Operation Blackboard is incurred by the Department of Rural Development under the National Rural Employment Programme (NREP).

Specifically in Tamil Nadu, the Department of *Adhi Dravidar* and Tribal Welfare, Directorate of Rural Development and the

Directorate of Municipal Administration have substantial expenditures on education. The Directorate of Rural Development, Directorates of Social Welfare and the Nutritious Meal Programme fund the midday meal programme in schools. While the Department of Education meets a major share of expenditure on education, other departments in the state too finance around 15–20 per cent of the total expenditure on education (Table 8.8).

Table 8.8
Expenditure on Education by Various Departments (%)

Year	Education Department	Other Departments			Total	Grand Total
		Education	Formal	Informal		
1980–81	83.8	81.9	9.8	8.3	16.2	100.0
1981–82	81.8	81.7	8.4	9.9	18.2	100.0
1982–83	82.3	75.3	8.0	16.7	17.7	100.0
1983–84	84.0	70.5	8.6	20.9	16.0	100.0
1984–85	83.2	76.9	2.9	20.2	16.8	100.0
1985–86	81.4	76.5	6.9	16.6	18.6	100.0
1986–87	81.5	76.4	6.9	16.7	18.5	100.0
1987–88	84.8	62.7	25.4	11.9	15.2	100.0
1988–89	86.5	48.9	44.0	7.1	13.5	100.0
1989–90	87.6	58.8	35.1	6.1	12.4	100.0
1990–91	87.6	62.8	34.2	3.0	12.4	100.0
1991–92	87.6	62.0	35.5	2.5	12.4	100.0
1992–93	85.7	75.1	24.4	0.5	14.3	100.0
1993–94	84.8	69.6	30.0	0.4	15.2	100.0
1994–95	83.4	55.9	43.7	0.4	16.6	100.0
1995–96	85.7	64.4	35.6	–	14.3	100.0
1996–97	89.1	70.9	28.9	0.3	10.9	100.0
1997–98	85.4	66.9	33.0	0.2	14.6	100.0
1998–99	88.2	68.6	31.2	0.2	11.8	100.0
1999–2000	89.4	69.3	30.5	0.2	10.6	100.0
2000–01	87.9	79.1	20.6	0.3	12.1	100.0
2001–02	83.5	69.8	30.1	0.2	16.5	100.0
2002–03RE	82.8	70.6	29.2	0.2	17.2	100.0
2003–04BE	82.9	70.2	29.6	0.1	17.1	100.0

Source: MHRDa, various years.

Note: RE = revised estimates; BE = budget estimates. Other departments spend on education, formal training, and informal training.

One finds a marginally declining trend in the relative share of other departments in education since 1987–88. This figure came down to 10 per cent in 1999–2000, although according to the budget estimates for recent years, the share of other departments should

increase to 17 per cent. In general, the education department incurred more than 80 per cent of the total expenditure on education.

Given the size of the expenditure by other departments, to focus on the education expenditure incurred solely by the Department of Education would lead to a serious under-estimation of total government expenditure on education in any state. The other departments spend on three kinds of education: formal education, formal training and informal training/education (Table 8.8). For expenditure on education incurred by other departments, the focus used to be formal education; however during the last decade, the relative importance given to formal training has increased. The expenditure on informal education is negligible.

Since an expansion in education would benefit all departments and all sectors of the economy, it may be good if every department allocates a small fraction of its budget to education. This could be directly spent on education by the department or reallocated to the education sector. In this sense, the requirement to allocate a fixed proportion of the budgets to education sector would not only pertain to a few departments, such as the Departments of Tribal Welfare and Social Welfare.

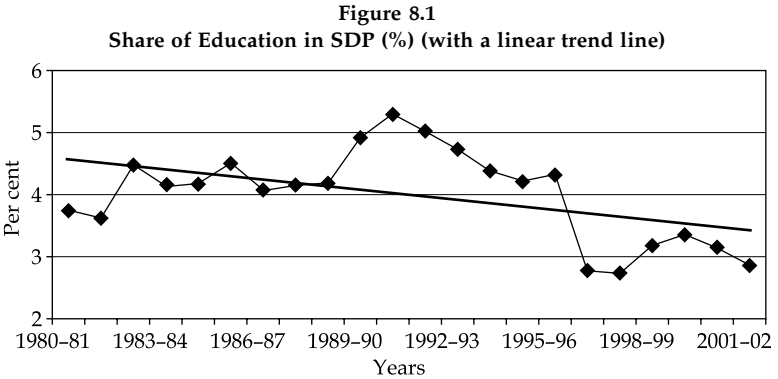
Relative Priorities: Inter-sector Allocation of Resources

The priority given to education in the total state economy can be analysed in terms of a variety of indicators: the share of education in State Domestic Product (SDP), share of education in total government expenditure and share of education in five-year plan expenditures.

Government efforts towards the development of education is shown by the per cent of state income spent on education. The performance of the state of Tamil Nadu is impressive in this regard. Public expenditure on education as a proportion of SDP increased from 3.8 per cent in 1980–81 to 5.3 per cent in 1990–91, but subsequently it decreased to less than 4 per cent in 1996–97, as shown in Figure 8.1.

Thus, if we concentrate on the period since 1990–91, the performance of the state, as that of many other states, is unsatisfactory. The period from 1990–91 was characterised by a steady and steep decline in the relative priority given to education, as reflected

in the share of SDP allocated to education. A linear trend line (in Figure 8.1) indicates the flattening of the line in the near future, stabilising around 3 per cent. Education expenditure remained above 4 per cent in the SDP over the period until 1995–96.

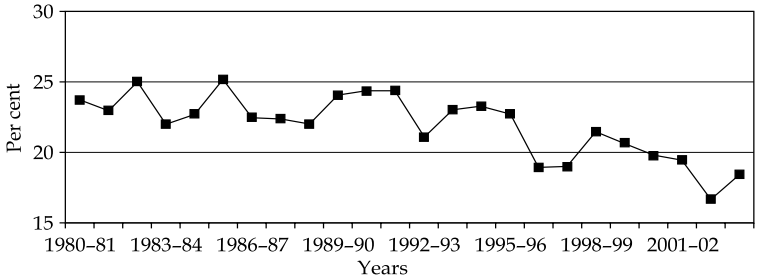


Source: Government of India, various years.

The Government of India has promised to allocate at least 6 per cent of national income to education. Himachal Pradesh (HP) and Kerala—both high-achiever states in elementary education—already spend above 6 per cent of their respective SDP on education.⁷ The state of Tamil Nadu needs to make special efforts to raise its allocation to education as a proportion of its SDP in order to reach the national norm of 6 per cent. This seems to be a challenging task.

A more important gauge of governmental priority given to education is measured in terms of expenditure on education as a percentage share of total government expenditure. This is more important because the government has more direct control on government expenditure than on SDP. In Tamil Nadu, 26 per cent of the revenue budget of the state was allocated to education in 1961–62 (higher than the national average). This high level could not be maintained, although it continues to be reasonably high compared to national level. There are significant and frequent fluctuations in the share, reflecting changing governmental priorities and a changing relative emphasis placed on education in the budget. (Figure 8.2) Though it declined to below 20 per cent in recent years, on the whole, the share tends to stabilise near 20 per cent.

Figure 8.2
Share of Education in Total Expenditure of the State
(revenue account, %)

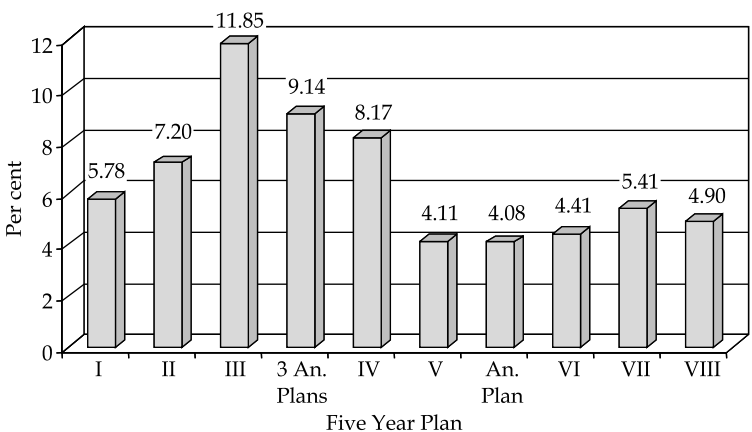


Source: Government of India, various years.

Education in Five Year Plans

The five year plan allocations provide important directions for development and set targets for achievement within the five year plan period. The relative priority accorded to education in the five year plans in Tamil Nadu has steadily decreased from the Third Five Year Plan onwards. In the Third Five Year Plan, the state had allocated nearly 12 per cent of the total plan outlay/expenditure to education, which declined to about 4 per cent by the Fifth Five Year Plan.

Figure 8.3
Share of Education in Five Year Plans (%)

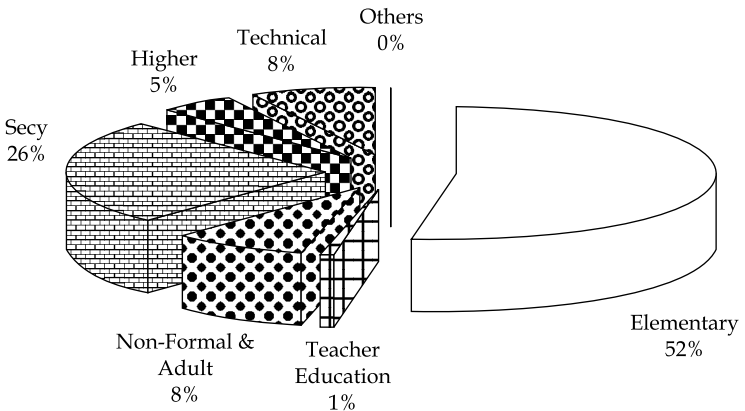


Source: Same as Figure 8.2.

The preceding period of plan reduction seriously affected educational priority, and there was a special effort to increase the priority of the Seventh and Eighth Five Year Plans (Figure 8.3). This could be due to special programmes launched after the formulation of *National Policy on Education 1986*. The tempo was however not maintained in the following period and the increasing trend failed with the Eighth Five Year Plan. Five year plan outlays are important as they set new directions for development, but there has been an unsteady flow of funds to education in the five year state plans.

In the context of allocating resources to the five year plans, information is available on general education specifically referring to elementary education, adult education and technical education. *Ex ante* allocations are not always made separately or explicitly for secondary and higher education. This has been a recent phenomenon, as attention is being concentrated on elementary (particularly primary) education, and secondary and higher education have been combined in one category. However, state documents do provide, *ex post*, breakdowns of expenditure on secondary and higher (collegiate and university separately) education. The allocation of resources in the Eighth Five Year Plan is shown in Figure 8.4.

Figure 8.4
Intra-sectoral Allocation of Education Outlay
in the Eighth Five Year Plan

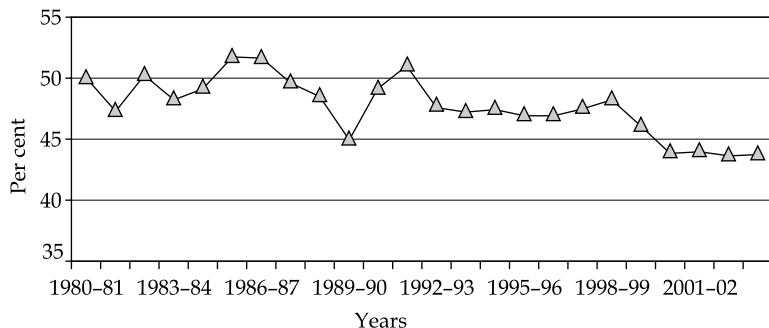


Source: Government of India, 1997-98.

The pattern of resource allocation in the seventh and the Eighth Five Year Plans seem to be exactly alike. About 90 per cent of the plan resources were expended on general education in both five year plans, with the remainder on technical education. The share of technical education remained static at 8 per cent of the total. Of the total allocation for education, elementary education obviously accounts for the most. In the two five year plans, the share for elementary education was above 50 per cent. The relative priority for adult education also increased from 4 per cent in the Seventh Five Year Plan to 8 per cent in the Eighth Five Year Plan. Higher education seems to be suffering and was as low as 5 per cent in the Eighth Five Year Plan.

The earlier discussion refers to plan expenditures only. As already noted, non-plan expenditures in education are sizeable. In the total plan and non-plan expenditure on education, the share of elementary education oscillated between 40 per cent and 50 per cent during 1980–81 to 2003–04 (Figure 8.5).

Figure 8.5
Share of Elementary Education in the Total Budget
Expenditure on Education (%)



Source: Government of India, various years.

The share of secondary education increased from about one-fourth in the early 1980s to about one-third in the late 1980s. A dramatic decline was noted in the share of higher education from 17 per cent in 1980–81 to less than 10 per cent in 1995–96 which seems to continue (Table 8.9).

Table 8.9
Intra-sector Allocation of Resources in Education (%)

<i>Year</i>	<i>Elementary</i>	<i>Secondary</i>	<i>Adult</i>	<i>Technical</i>	<i>Higher</i>	<i>Others</i>	<i>Total</i>
1980-81	49.9	26.1	0.7	3.8	17.4	2.1	100
1981-82	47.5	28.8	0.4	3.9	17.5	1.9	100
1982-83	50.5	26.4	0.4	4.3	17.2	1.2	100
1983-84	48.2	27.3	0.5	3.8	17.1	3.1	100
1984-85	49.3	27.6	0.6	4.0	17.3	1.2	100
1985-86	52.0	26.0	0.5	3.6	16.5	1.4	100
1986-87	51.8	26.2	0.0	3.7	16.7	1.6	100
1987-88	49.6	35.6	1.0	3.9	9.5	0.4	100
1988-89	48.6	36.0	1.0	3.5	10.0	0.9	100
1989-90	44.8	33.8	0.8	3.8	16.3	0.5	100
1990-91	49.5	35.5	0.7	3.4	10.4	0.5	100
1991-92	51.4	34.3	0.7	3.0	9.2	1.4	100
1992-93	47.6	36.0	0.6	3.5	9.9	2.4	100
1993-94	47.3	35.9	0.6	3.4	10.1	2.7	100
1994-95	47.4	36.4	1.1	3.3	10.1	1.7	100
1995-96	47.0	37.0	0.5	3.0	9.9	2.6	100
1996-97	46.9	36.8	0.2	9.6	3.0	3.5	100
1997-98	47.6	36.7	0.2	10.0	3.2	2.4	100
1998-99	48.3	37.5	0.1	7.5	3.1	3.6	100
1999-2000	46.0	37.0	0.0	11.4	3.3	2.2	100
2000-01	43.7	36.9	0.1	12.0	3.2	4.2	100
2001-02	44.0	38.5	0.0	11.5	3.0	3.0	100
2002-03RE	43.6	38.2	0.0	12.1	2.6	3.6	100
2003-04BE	43.7	38.6	0.0	12.1	2.6	3.1	100

Source: MHRD (1994); MHRDa.

Note: RE = revised estimates; BE = budget estimates.

Expenditure on Elementary Education

As shown in Table 8.10, total public expenditure on elementary education increased from Rs 1,170 million in 1980-81 to Rs 24,452 million in 2003-04 (budget estimates). In constant prices, it grew at an annual rate of 6 per cent, although the actual growth took place only during the 1980s. In the 1990s, the rate of growth was below 5 per cent. However, since enrolments were not rapidly increasing even during the 1990s, the per student expenditure increased at a rate of 8 per cent per annum, while in the 1980s the corresponding rate of growth was 5.6 per cent (Table 8.11). Herein lies the importance of the low and declining TFR in the state—which none of the other states under consideration in this book have benefited from to the extent that Tamil Nadu has.

Table 8.10
Expenditure on Elementary Education by
Plan and Non-plan Account (Rs in million)

Year	<i>In Current Prices</i>			<i>In 1993-94 Prices</i>		
	<i>Plan</i>	<i>Non-Plan</i>	<i>Total</i>	<i>Plan</i>	<i>Non-Plan</i>	<i>Total</i>
1980-81	78	1,096	1,174	246	3,456	3,701
1981-82	97	1,158	1,255	281	3,357	3,639
1982-83	157	1,551	1,708	422	4,173	4,595
1983-84	36	1,751	1,787	88	4,299	4,387
1984-85	113	2,027	2,140	265	4,762	5,028
1985-86	364	2,367	2,731	781	5,082	5,863
1986-87	371	2,374	2,745	707	4,525	5,232
1987-88	428	2,930	3,358	735	5,029	5,763
1988-89	397	3,340	3,737	656	5,521	6,177
1989-90	481	4,189	4,670	727	6,331	7,058
1990-91	412	5,828	6,240	579	8,184	8,763
1991-92	411	6,943	7,354	504	8,513	9,017
1992-93	306	7,011	7,317	340	7,781	8,120
1993-94	396	7,691	8,087	396	7,691	8,087
1994-95	419	8,450	8,869	395	7,967	8,362
1995-96	624	9,348	9,972	534	8,003	8,537
1996-97	828	10,757	11,585	652	8,467	9,119
1997-98	808	12,703	13,511	593	9,327	9,920
1998-99	766	17,544	18,310	520	11,895	12,415
1999-2000	726	18,869	19,594	486	12,643	13,129
2000-01	620	18,171	18,791	402	11,793	12,195
2001-02	544	17,899	18,444	342	11,251	11,593
2002-03RE	783	18,388	19,171	-	-	-
2003-04BE	948	20,503	21,452	-	-	-
<i>Rate of Growth (%)</i>						
1980-90	24.0	16.7	17.2	14.2	7.5	8.0
1990-2000	8.7	3.2	13.0	0.6	4.8	4.6
1980-2000	11.1	15.4	15.1	2.2	6.3	6.0

Source: MHRDa

Note: RE = revised estimates; BE = budget estimates; - not available.

The total and per student expenditures have been stepped up significantly only towards the 1990s, particularly after 1996-97. The last column in Table 8.11 also indicates that per student expenditure on elementary education, as a proportion of SDP per capita has been around 11-15 per cent. This was nearly 15 per cent in 1990-91, but later declined to 11 per cent in 1994-95.

Table 8.11
Expenditure on Elementary Education Per Student (Rs)

	<i>Current Prices</i>	<i>In 1993–94 Prices</i>	<i>As % of Per Capita NSDP</i>
1980–81	170.00	535.98	11.4
1981–82	179.00	518.96	10.1
1982–83	235.00	632.25	13.3
1983–84	238.00	584.30	11.7
1984–85	277.00	650.79	11.8
1985–86	344.00	738.53	13.1
1986–87	339.00	646.15	11.7
1987–88	405.00	695.09	11.9
1988–89	448.00	740.56	11.9
1989–90	553.00	835.72	12.7
1990–91	739.00	1,037.81	14.9
1991–92	847.00	1,038.50	14.7
1992–93	833.00	924.45	12.6
1993–94	909.00	909.00	11.5
1994–95	991.00	934.40	11.0
1995–96	1,111.00	951.16	11.6
1996–97	1,618.58	1,274.01	12.1
1997–98	1,829.60	1,343.30	11.9
1998–99	2,594.40	1,759.07	14.7
1999–2000	2,930.61	1,963.68	15.7
2000–01	2,961.61	1,922.07	14.9
2001–02	2,945.49	1,851.41	14.0
2002–03RE	2,959.26	–	
<i>Growth Rates (%)</i>			
1980–90	14.7	5.6	
1990–2000	16.9	8.2	
1980–2002	15.5	6.3	

Source: MHRDA; MHRDb.

Note: RE = revised estimates; BE = budget estimates.

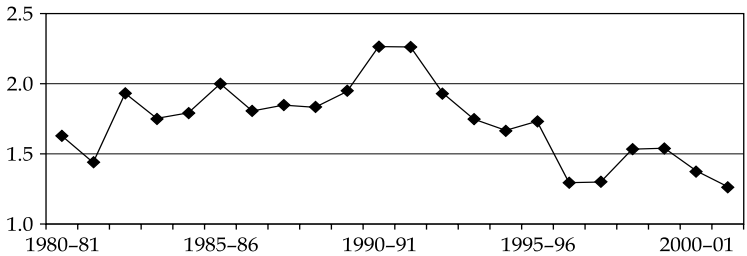
As in the case of expenditure on education as a whole, even for elementary education, plan expenditures form a very small proportion (about 5 per cent) of the total. Immediately after the National Policy on Education 1986 was formulated (1986–87), the relative proportion of plan expenditure increased to an all-time high of 13.5 per cent, but fell to a low of 4.2 per cent in 1992–93. Even after Operation Blackboard and District Primary Education Programme (DPEP) were launched, the relative shares of plan expenditures did not significantly increase.

Share of Elementary Education in SDP

The resources allocated to elementary education, as a proportion of SDP, are not significantly different from what is allocated at the national level. The efforts to increase the relative proportion substantially did not succeed. Even when the proportion reached a high of 2.3 per cent in 1990–91 and 1991–92, this was not sustained. According to the estimates for 2001–02, the proportion could be as low as 1.3 per cent (Figure 8.6).

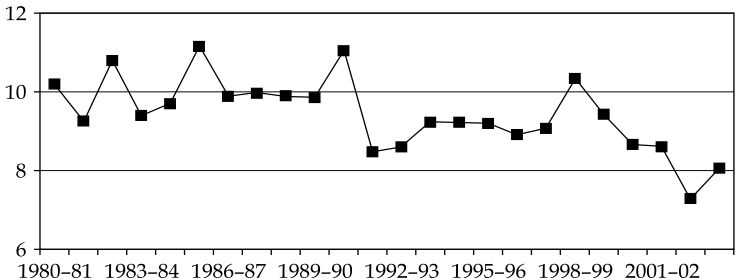
Within the total budgetary framework of the state, the priority given to elementary education has reflected similar trends (Figure 8.7). A steep decline occurred in the early 1990s, and efforts to reverse the trend only marginally succeeded. The 11 per cent proportion which was allocated to elementary education in 1990–91 remains elusive.

Figure 8.6
Share of Elementary Education in SDP (%)



Source: Government of India, various years.

Figure 8.7
Share of Elementary Education in the State Budget (%)



Source: Government of India, various years.

Itemised Expenditure on Elementary Education

Based on the classification adopted in the budgets, we note in Table 8.12 that very small amounts are spent on textbooks, direction and supervision, and almost nothing on teacher training and scholarships. The largest amounts are allocated to government and private schools and are largely spent on teacher salaries.

Even assistance to local bodies is not an important item in terms of amounts, although there may be a problem in the budget classification. 'Government schools' may include salaries for teachers in local body schools as well, as up to 75 per cent of schools are run by local bodies (municipalities and *panchayats*).

The budgetary classification given in Table 8.12 does not include incentives other than scholarships that the state does offer (for example midday meals, textbooks and uniforms). The midday meals scheme, a centrally-sponsored scheme, is in operation in more than 40,000 schools, benefiting more than 6,000,000 children in the age group 5–15. In 1995–96, the budget expenditure for the programme was about Rs 6 million.

Households also find the midday meals and other incentive schemes very beneficial (Table 8.13). Based on the household survey (Unicef survey, 1999), more than 90 per cent of the children in rural areas from grades 1–8 get free or subsidised books; more than 80 per cent get midday meals; more than 70 per cent receive free uniforms; and 2 per cent receive monetary scholarships. In urban areas, about 50 per cent received books and about 40 per cent received midday meals and uniforms. It is of significance that there is not much difference in the percentage of children from different caste groups who receive textbooks and free uniforms in rural areas. However, more than 95 per cent of Scheduled Caste/Tribe (SC/ST) children, 80 per cent of children belonging to Other Backward Castes (OBCs) and 45 per cent of children belonging to other (non-backward) category received midday meals.

In urban areas, 76 per cent of SC children receive free books; 53 per cent of OBC and 30 per cent of other category children receive free books. About 70 per cent of SC children receive midday meals, while 30 per cent of OBC and 20 per cent of other category children have midday meals.

Table 8.12
Distribution of Elementary Education Expenditure (%)

	<i>Direction*</i>	<i>Assistance to</i>				<i>Teacher Training</i>	<i>Non-Formal Education</i>	<i>Scholarships</i>	<i>Text-books</i>	<i>Others</i>	<i>Total</i>
		<i>Govt Schools</i>	<i>Private Schools</i>	<i>Local Body Schools</i>	<i>Schools</i>						
1992-93	0.1	58.9	29.2	6.3	0.0	0.0	0.0	1.9	3.6	100	
1993-94	0.8	61.6	31.6	0.6	0.0	0.0	0.0	1.6	3.8	100	
1994-95	0.1	61.8	32.1	0.4	0.0	0.0	0.0	1.7	3.9	100	
1995-96	0.1	62.3	31.7	0.5	0.0	0.0	0.0	0.8	4.6	100	
1996-97	0.1	61.8	31.9	0.4	0.0	0.0	0.0	2.5	3.3	100	
1997-98	1.9	62.5	29.9	0.6	0.0	0.0	0.0	1.3	3.9	100	
1998-99	2.7	61.9	30.8	0.8	0.0	0.0	0.0	1.0	2.9	100	
1999-2000	3.0	62.6	30.9	0.4	0.0	0.0	0.0	0.6	2.5	100	
2000-01	3.2	62.9	31.5	0.3	0.0	0.0	0.0	0.5	1.7	100	
2001-02	3.1	64.0	32.0	0.4	0.0	0.0	0.0	0.0	0.5	100	
2002-03RE	3.1	61.1	32.8	0.3	0.0	0.0	0.0	0.9	1.9	100	
2003-04BE	3.1	63.2	31.0	0.2	0.0	0.0	0.0	0.8	1.6	100	

Source: MHRDa.

Note: * includes inspection and administration, 1996-97 revised estimates; 1997-98: budget estimates.

Table 8.13
Percentage of Children in Grades 1-8 Benefiting from Incentive Schemes

<i>Details of Incentive Schemes</i>	<i>Rural</i>				<i>Urban</i>			
	<i>Govt</i>	<i>Private</i>		<i>Other</i>	<i>Govt</i>	<i>Private</i>		<i>Other</i>
		<i>Aided</i>	<i>Unaided</i>			<i>Aided</i>	<i>Unaided</i>	
1. Books	94.6	94.4	54.6	98.4	87.4	48.3	7.4	87.5
2. Stationery	11.4	8.5	0.0	4.8	0.8	0.0	1.5	0.0
3. Uniform	76.6	80.3	45.5	80.7	67.2	30.3	10.3	75.0
4. Footwear	8.2	11.3	0.0	0.0	3.4	0.0	0.0	0.0
5. Midday Meal	84.2	83.1	45.5	93.6	61.3	33.7	2.9	75.0
6. Scholarship	2.2	2.8	0.0	0.0	0.0	0.0	0.0	4.2
7. Attendance Money	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8. Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Unicef Survey, 1999-2000.

Nationally Sponsored Schemes

The state receives assistance of two categories from the centre through nationally sponsored schemes: (a) grants for schemes included in the state plan, (b) grants exclusively for nationally-sponsored schemes.

The first category forms part of the national assistance to the state plan as a whole, and the quantity and nature of aid may vary from one plan to the other. In Tamil Nadu, only two programmes figure in the list of nationally-sponsored schemes that are shared between the state and the centre: the non-formal education scheme for dropouts and non-starters and the vocationalisation of higher secondary education (Government of Tamil Nadu, 1999b). All other programmes are completely nationally financed. Programmes like the DPEP are externally funded through the Indian government.

Of the 22 nationally sponsored schemes in education, the state of Tamil Nadu received assistance for only 17 programmes. Of the 17, only two to four received significant amounts. DPEP is currently the most important programme in terms of financial assistance. From 1998–99, Rs 900 million were provided to the state by the Indian Government under DPEP. The second most important scheme is teacher education, for which Rs 250 million were received in 1998–99. This is one scheme for which the national assistance has been not only substantial, but steady. The amount increased steadily from Rs 50 million in 1992–93 to Rs 250 million in 1998–99 (current prices). Operation Blackboard and vocational education are the other two programmes for which an assistance of Rs 20 million each was received; all other schemes received insubstantial amounts. Since Operation Blackboard has already covered most of the schools, the expenditure needs from this account is likely to decline fast.

In all, there was a significant increase in the expenditure on nationally-sponsored schemes during 1992–93 to 1998–99 (Table 8.14). The total expenditure has increased from Rs 170 million to Rs 1,200 million during this period (current prices). The rate of growth in real (1980–81) prices is also high, at 20.5 per cent per annum.

A glaring feature of the trends in expenditure on nationally-sponsored schemes is lack of consistency in the amounts; no systematic trend has existed. For instance, non-formal education

Table 8.14
Details on Major Nationally Sponsored Schemes (Rs million)

Scheme	Expenditure/Year									
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99			
Operation Blackboard	0.0	23.4	41.2	0.0	0.0	72.5	20.9			
Non-formal Education	0.12	0.0	2.4	18.9	21.3	24.6	2.6			
Teacher Education	48.7	35.5	44.2	64.0	73.2	86.9	246.9			
Vocational Education	0.0	70.0	70.7	0.0	0.0	0.0	20.9			
Science Education	0.0	0.1	0.0	0.0	0.0	0.1	0.0			
Education Technology	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Environment Education	0.4	0.0	0.0	0.0	1.1	1.9	2.7			
IEDC	2.9	0.5	0.4	1.3	0.7	1.7	2.5			
CLASS	0.0	17.0	15.3	11.0	11.2	0.0	0.0			
Promotion of yoga	0.2	0.0	0.0	0.0	0.0	0.0	0.0			
RFLP	0.0	0.0	0.1	0.0	0.0	0.0	0.0			
JSN/PL&CE	0.0	12.1	6.4	8.3	0.0	36.3	0.0			
SAS	4.6	6.6	10.3	6.9	6.7	5.9	0.0			
Appointment of Hindi Teachers	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

(Table 8.14 contd.)

(Table 8.14 contd.)

Scheme	Expenditure/Year									
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99			
Development of Sanskrit	0.7	0.8	0.8	1.0	0.8	0.8	2.2			
National Scholarship	0.0	0.0	0.5	0.7	0.1	0.0	0.0			
Scholarships for Talented Children	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Upgrade SC/ST	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
TLC/PLC	114.6	92.6	115.2	96.5	10.1	7.5	2.2			
DPEP	0.0	5.0	78.7	213.9	117.4	434.0	895.0			
Madrasa Education	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Minorities Education	0.0	0.0	0.0	0.0	0.0	0.0	7.3			
Total	172.2	263.6	386.2	422.5	242.6	672.2	1,203.2			
Total (in 1980-81 Prices)	60.8	83.7	116.4	117.5	60.4	157.9	282.4			

Source: MHRDC.

Note: Total in 1980-81 prices in 1998-99 based on the deflator of 1997-98. JSN: Jana Shikshyan Nilayam; PL&CE: Post-literacy and Continuing Education.

received Rs 25 million in 1997–98; in the following year, the corresponding amount fell to Rs 2.6 million. The schemes of *Jana Shikshyan Nilayam* (JSN) and Post-literacy and Continuing Education (PL&CE) were given Rs 8.3 million in 1995–96; in the next year the grant was zero; and in the subsequent year Rs 37 million were sanctioned. From 1992–98, first time assistance of Rs 7.3 million was provided under the ‘minorities education’ scheme. Such inexplicable trends are common with many nationally-sponsored schemes. Perhaps these trends reflect changing priorities of the central and state governments.

In addition, there has been the problem that despite funds being sanctioned by the central government for the centrally-sponsored schemes, the release of funds remains well below sanctioned amounts. In other words, either utilisation of funds is low at state level, or poor management practices prevent the funds from actually reaching the state spending authority in time. In this respect, Tamil Nadu’s experience is similar to that of most other states examined in this book.

In summary, there has been an impressive growth of public expenditure on education in constant prices for total and per student amounts in the state. As a proportion of GDP, about 4 per cent is allocated for education in the state. As a proportion of the budget, education accounts for about 23 per cent. Elementary education accounts for nearly half of the total expenditure on education. In the total education sector, as well as in elementary education, plan expenditure forms a very small proportion: more than 90 per cent of funds are in the non-plan category. The state is also far from the national goal of allocating 6 per cent of GDP to education, and needs to make substantive steps in order to achieve this.

5. HOUSEHOLD COSTS OF ELEMENTARY SCHOOLING

As earlier research (Tilak, 1996; 2000a) has shown, one possible reason for inadequate demand for schooling is the high private cost (including opportunity cost) of education which many cannot afford. Research in this area is rather limited in India.⁸ In the case of primary education, the family will bear the tuition fees, expenditure for transport, uniform and other expenses, in addition to foregone earnings if the child attends school. Various other reasons may also prevent a child from attending school, such as poor

quality of education, distance of school and lack of parental interest which may be related to costs of education. Therefore, one can consider the household (direct) cost of education as an important determinant of demand. The less visible are opportunity costs, or foregone earnings. The direct costs include payments to the schools for tuition, examination fees, development fees, registration fees and several other of fees and charges, which are not necessarily paid to the school. The latter includes expenditures on textbooks and stationery, uniforms, transport, hostel, private tuition, and so on. Here we are concerned with only direct costs, although opportunity costs of education are important and earlier research has found that they are sizeable (Tilak, 1988).

Household costs of education are estimated based on the Unicef survey (Table 8.15). According to the survey results, a rural family spends roughly Rs 1,000 per year per child on primary education and Rs 1,691 on upper primary education. The expenditures in urban families are 41 per cent higher than that in rural families at the primary level and are 6 per cent higher at the upper primary school level.⁹ Both rural and urban households spend relatively higher amounts for boys (except for primary education in rural areas) than for girls' education.¹⁰

Table 8.15
Household Cost of Primary and Upper Primary Education
(Rs per child per year)

<i>Level of Education</i>	<i>Rural</i>			<i>Urban</i>			<i>Total</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Primary	915 (122)	1,090 (115)	1,002 (237)	1,439 (88)	1,381 (87)	1,410 (175)	1,135 (210)	1,215 (202)	1,176 (412)
Upper primary	1,906 (54)	1,376 (37)	1,691 (91)	1,918 (68)	1,637 (57)	1,790 (125)	1,913 (122)	1,534 (94)	1,748 (216)
All	1,219 (176)	1,160 (152)	1,192 (328)	1,648 (156)	1,432 (144)	1,568 (300)	1,421 (332)	1,292 (296)	1,372 (628)

Source: Unicef Survey, 1999–2000.

Note: Figure in parentheses indicate the number of sample children.

In addition, backward sections of the society (SCs/STs/OBCs) were found to be spending less than the other castes. In primary education in rural areas, the differences are not large; but in case

of primary and upper primary education in urban areas, and also upper primary in rural, the differences are very high and favour the other castes (Table 8.16).

Table 8.16
Household Expenditure on Primary and Upper Primary Education by Caste (Rs per child per year)

<i>Caste Category</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Primary</i>	<i>Upper Primary</i>	<i>Primary</i>	<i>Upper Primary</i>
Scheduled Castes	1,048	1,918	919	1,387
Scheduled Tribes	846	1,600	0	0
Other Backward Castes	943	1,500	1,507	1,831
Others	1,628	3,463	3,418	2,926
Total	1,000	1,691	1,410	1,790

Source: Unicef Survey, 1999–2000.

The household expenditure is highest in private unaided schools at both primary (Rs 2,118 in rural areas and Rs 3,062 in urban areas) and upper primary levels (Rs 3,811 in urban areas) (Table 8.17). The second highest figure refers to private aided schools. A comparison of government schools with other local body schools reveals that on average, the household cost is relatively lower for both primary and upper primary levels in local body schools in urban as well as rural areas. Specifically, in urban areas, the cost of studying in a private school is three times higher than that in a public school.

Table 8.17
Household Cost on Primary and Upper Primary Education by Type of School (Rs per child per year)

<i>Type of Institutions</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Primary</i>	<i>Upper Primary</i>	<i>Primary</i>	<i>Upper Primary</i>
Government	1,056	1,415	638	1,240
Pvt. Aided	1,234	2,661	1,173	1,667
Private Unaided	2,118	–	3,062	3,811
Others	466	953	490	681
Total	1,000	1,691	1,410	1,790

Source: Unicef Survey, 1999–2000.

Household costs are also systematically related to parental income, education and occupation levels (Table 8.18). The household costs of primary and upper primary school education in low-income rural families are relatively higher than that in urban families. This could explain why the enrolment rate in urban areas is higher than that in rural areas. The figures in Table 8.18 also reveal that the parents' education is positively associated with expenditure on education in urban areas, and possibly pertains to

Table 8.18
Household Expenditure on Elementary Education (Rs per child) by Income, Education and Occupation of Parents

<i>Details</i>	<i>Rural</i>		<i>Urban</i>	
	<i>Primary</i>	<i>Upper Primary</i>	<i>Primary</i>	<i>Upper Primary</i>
Income Levels of Parents (in Rs)				
Below 6,000	791	1,478	0	0
6,000–12,000	830	1,069	545	981
12,000–24,000	1,202	1,801	950	1,329
24,000–50,000	1,559	4,303	2,002	1,848
50,000–100,000	2,870	1,880	1,708	2,898
>100,000	0	0	3,493	3,074
Parent's Education				
Illiterate	801	1,283	923	914
Primary	998	1,511	1,054	1,166
Upper primary	1,212	2,579	1,034	1,223
Secondary/Senior				
Secondary	1,209	1,379	1,749	2,291
Graduate	517	1,203	3,190	3,802
Above Graduate	5,450	0	4,850	0
Parent's Occupation				
Housework	1,235	250	0	605
Farmer	1,319	2,237	680	1,730
Agr. Labour	834	1,175	840	850
Servant	0	0	495	1,100
Street Vendor	920	880	770	1,720
Skilled (manual)	603	1,570	1,024	1,221
Skilled worker	964	1,775	1,950	1,271
Clerk	1,020	1,553	2,535	1,796
Self Employment	514	645	1,317	2,597
Business	3,979	3,015	2,068	3,231
Managers	0	0	4,850	3,775
Others	1,086	2,657	771	1,775

Source: Unicef Survey, 1999–2000.

rural areas as well. In rural areas, the expenditure initially increases with parents' education levels and then declines. Households belonging to the occupation groups of managers and business people spend more on their children's education in urban areas, while farmers and businessmen spend more in rural areas. Parents' education, occupation and earnings are correlated. The results also indicate that parents' education is the primary influence on demand for education of the children. Hence, efforts should be taken to raise overall education levels for all people in the state.

The total household cost of primary education of a girl child (Rs 1,090) is slightly higher than that of boys (Rs 916) in the rural areas (Table 8.19). Uniforms, pocket expenses and books/stationery costs for boys are relatively higher than for girls. The costs on transport constitute around 5 per cent and 10 per cent of all costs respectively for boys and girls. In urban areas costs of education of boys are not significantly different from those for girls. The total household cost of primary education per student is about Rs 1,400. Fees and books together with uniform/footwear form the largest proportion of total costs (about 70 per cent).

Table 8.19
Itemised Household Expenditure on Primary Education
(Rs per child per year)

<i>Item of Expenditure</i>	<i>Rural</i>			<i>Urban</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Fees	91	143	116	492	518	505
Books	111	95	104	173	182	177
Stationery	84	94	89	85	101	93
Uniform/Footwear	299	315	307	369	377	373
Pocket exp.	200	204	202	54	24	39
Donations	18	20	19	98	38	68
Exam fees	20	25	22	26	23	25
Transport	46	108	76	58	37	48
Others	47	86	66	84	80	82
Total Cost	916	1,090	1,001	1,439	1,380	1,410

Source: Unicef Survey, 1999–2000.

The composition of household costs of upper primary education in rural as well as urban areas is given in Table 8.20. The average annual cost upper primary education for boys (Rs 1,906) in rural Tamil Nadu is about 40 per cent higher than for girls. Uniform costs

absorb around 40 per cent of all costs for girls' education and about 26 per cent for boys. There is not much difference in the percentage share of fees from the total costs of education for boys and girls. In urban areas, the total cost of upper primary education for girls (Rs 1,637) is less than for boys. Fees and expenditures on books/stationery and uniforms account for the major share of total costs for upper primary education for both boys (71 per cent) and girls (81 per cent).

Table 8.20
Itemised Expenditure on Upper Primary Education
(Rs per child per year)

<i>Item of Expenditure</i>	<i>Rural</i>			<i>Urban</i>		
	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
Fees	198	161	183	711	580	651
Books	241	147	203	263	217	242
Stationery	128	104	118	107	116	111
Uniform/Footwear	493	524	505	499	481	491
Pocket exp.	278	212	251	42	54	48
Donations	190	8	116	23	72	45
Exam fees	44	35	41	21	18	20
Transport	261	110	199	114	58	88
Others	73	77	74	137	41	93
Total	1,906	1,376	1,691	1,918	1,637	1,790

Source: Unicef Survey, 1999–2000.

The sum up, in rural areas in Tamil Nadu, on average families spend Rs 1,000 per annum on primary education of their child and Rs 1,700 per annum on upper primary education. In urban areas, the household cost of primary education is around Rs 1,400 and upper primary education is Rs 1,800. Families spend a little more on education for boys than for girls. Genderwise differences are not systematic. Fees and costs on books and uniforms/footwear constituted about three-fourths of the total household cost of elementary education in the state.

These results reveal unequivocally the fact that the elementary education is not really free. Along with public spending, the households also spend considerable amounts on elementary education. Since the dropouts and never-enrolled children are still high in number, one can infer that most families in these cases are unable to bear the costs of schooling. Efforts should be made to reduce

the household costs of education, particularly in rural areas. Fee exemptions, and the provision of free textbooks, uniforms and midday meals may help in mitigating household burden to some extent and therefore improve school enrolment. Of course, it is hard to attribute a large proportion of non-enrolment to the single phenomenon such as household income.

6. POLICY IMPLICATIONS

Tamil Nadu is one of the educationally-advanced states in the country with higher than average rates of literacy, enrolment and other indicators of educational development. Although the relative position of the state in terms of education development has been consistently high, the state has not yet reached the level of development attained in states like Kerala and Himachal Pradesh in terms of several education development indicators (particularly UEE), though it promises success soon. It is essential to examine the educational system, policies and practices relating to education development in order to attain the target of UEE. Finances form the most important policy instrument of development. The good performance of the state in terms of the allocation of resources to education has resulted in improving the education situation significantly. The state funding of the midday meals programme and the provision of other incentives has also contributed significantly to the improvement of internal efficiency in schools.

Although Tamil Nadu is a relatively educationally-advanced state, the goal of UEE has not been reached and the internal efficiency of the education system is not very satisfactory, as reflected in high dropout rates and repetition rates. The state has also been unable to reach the national target of allocating 6 per cent of SDP to education. Given this, the state has to make special efforts towards reaching UEE in the shortest possible time.

- Government allocation to elementary education has to be increased significantly: as a proportion of the SDP, the state should try to allocate 6 per cent of its SDP to education from at least the beginning of the Eleventh Five Year Plan.
- In terms of plan allocations, in the Tenth Five Year Plan, the state should enhance the allocation to education to Second

Five Year Plan levels (7 per cent), and gradually reach the Third Five Year Plan level (12 per cent).

- The state should make special efforts to increase its allocation to education in the state revenue budget to about 30 per cent.
- At least half the allocation to education should be earmarked for elementary education, so that as a proportion of SDP, elementary education receives about 3 per cent (half of the proposed 6 per cent), and as a proportion of the state budget about 15 per cent (half of the proposed 30 per cent).
- Allocation of resources to schools—government, local body schools and private aided—have to be based on sound criteria (for example unit costs of education) and the mechanism should help in promoting equity, quality and efficiency in education.
- The resource allocation mechanism should specifically aim at reducing inter-group (gender, caste) and regional (rural-urban, inter-district and inter-block) disparities in elementary education.
- Allocations to quality related inputs in education (teacher training, textbooks and so on), need to be considerably enhanced. Such inputs should receive at least 10 per cent of the total recurring budgets allocated to elementary education.
- Similarly, items of equity nature—scholarships and other incentives such as textbooks, uniforms, footwear, and so on, besides midday meals, should be given priority.
- Since households already spend a lot on acquiring elementary education, which is a fundamental right, it is not desirable to rely upon increased levels of contributions from the households. The fact that household costs are systematically related to parental income, education and occupation heads needs to be placed in conjunction with other data that reveal that Tamil Nadu is among those states where economic growth has been significant, but employment generation has been poor. Hence, government expenditure for elementary education needs to compensate for parents' limited ability to spend on education.
- Similarly, the reliance of the state on the private sector for UEE is not good. The financial contribution of the private sector, other than household expenditures, is not significant for elementary education in the state.

- Given the needs of the education system as a whole, efforts should mobilise resources from different sources, government and non-governmental, without affecting equity, quality and efficiency in education.
- Given that often funds allocated by the central government for Tamil Nadu have not been utilised fully over the years, both the centre and the state government have to take action to ensure fuller utilisation of resources.
- The state should prepare a sound, long-term financial plan for the education sector in general and elementary education in particular. It should include both the allocation of resources and mobilisation of resources. Both these dimensions have to be based on realistic estimates of unit costs of education and of state finances. The plan should help in ensuring a steady and guaranteed flow of resources to education, including specifically to elementary education.
- Last, the statistical information system in elementary education has to be strengthened, in such a way that regular and reliable statistics are collected on not only presently available indicators, but also on student achievement levels, performance of the schools, private aided and unaided schools and so on.

All this suggests the need for a strong commitment and serious effort from the state in order to realise UEE. Elementary education, a fundamental right, cannot be allowed to suffer due to the paucity of financial resources. The advantages Tamil Nadu has in elementary education should not be lost.

Notes

1. While gross and net attendance ratios are almost synonymous with gross and net enrolment ratios respectively, age-specific attendance ratio refers to the ratio of number of children of a particular age-group currently attending any education institution to the population of the same age group.
2. The survey covered 356 rural households and 356 urban households, selected on the basis of a stratified selective sampling of districts, and it yielded information on 765 rural children and 426 urban children. The sample also covered boys and girls, children from scheduled castes/tribes, other backward castes and other castes, from various economic backgrounds, children with varied

- levels of education and with parents of various occupations. It also yielded valuable data on several socio-economic characteristics of households.
3. Panchamukhi and Mehrotra (2005) estimate that only Kerala (38.4 per cent) and West Bengal (18.8 per cent) have a higher share of children enrolled in private aided schools in India.
 4. Comparing the 1997–98 data in Table 8.4 for total private enrolment with the NSSO data for 1995–96 shows that there has been a slight increase by 1997–98 for total private (aided and unaided) enrolment.
 5. All figures are converted into real (1980–81) prices using state income deflators.
 6. All growth rates, unless otherwise mentioned are based on estimating the equation: $Y = a.b^t$.
 7. Jammu and Kashmir and Tripura spend above 10 per cent.
 8. See Panchamukhi (1990), Tilak (1991, 2000b, 2003) for some research on household expenditure on education in India.
 9. The differences become less and less, as one goes up the educational ladder (see also Tilak, 2003).
 10. When comparing these values with those of the NSS 52nd Round, these estimates are relatively higher. However, NSS estimates refer to 1995–96 while the above figures relate to 1999.

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