

Monograph 01/2011

Elementary Education in Bihar Progress and Challenges

PRABHAT P GHOSH
KUMAR RANA



**Centre for Economic Policy & Public Finance
Asian Development Research Institute**



©Copyright

Asian Development Research Institute (ADRI)

Publisher

Asian Development Research Institute (ADRI)

BSIDC Colony, Off Boring-Patliputra Road

Patna – 800 013 (BIHAR)

Phone : 0612-2265649

Fax : 0612-2267102

E-mail : adri_patna@hotmail.com

Website : www.adriindia.org

Printer

The Offsetters (India) Private Limited

Chhajjubagh, Patna-800001

Study Sponsored by

Pratichi (India) Trust

Disclaimer

This monograph may not reflect the views held either by the Centre for Economic Policy and Public Finance (CEPPF), ADRI or the Pratichi (India) Trust. Usual disclaimers apply.

Project Directors

Prabhat P Ghosh
Kumar Rana

Field Team

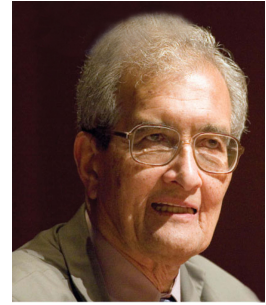
Sudeep Kumar Pandey

Devendra Kumar Singh	Shivnath Prasad Yadav
Rakesh Kumar	Shashi Ranjan Kumar
Narendra Tripathi	Bijendra Prasad
Swarna Vijay Pandey	Rahul Kumar
Rakesh Kumar	Shriniwas
Onkar Ranjan	Shashi Bhushan Mishra



CONTENTS

Foreword		i
Acknowledgements		ii
List of Tables		iii-iv
List of Figures		v
Highlights		vi-vii
Chapter I	Introduction	1-10
	Socio-economic Profile of Bihar	
	Sampling Design of Study	
	Plan of the Report	
Chapter II	Elementary Education in Bihar : An Overview	11-23
	Literacy Rates in Bihar	
	Elementary Education System	
	Enrolment in Elementary Schools	
	Incentive Schemes	
Chapter III	Child Enrolment in Schools : Progress and Challenges	24-33
	Enrolment Ratios	
	Attendance Pattern	
	Learning Achievement	
Chapter IV	Parental Background : Social Segmentation in Education	34-44
	Social Profile of Children	
	Attitudinal Profile of Parents	
	Learning Inputs at Home	
	Private Expenditure in Education	
Chapter V	Functioning of Schools : Infrastructure and Incentive Schemes	45-65
	Pre-School Education	
	School Availability and Infrastructure	
	Teaching Personnel	
	Profile of Teachers	
	Problems of Teachers	
	Teaching-Learning Process	
	Private Tutition	
	Supervision of Functioning of Schools	
	Incentive Schemes	
Chapter VI	Participation in School Governance	66-71
	Composition of VSS	
	Functions of VSS	
Chapter VII	Summary and Conclusion	72-81
Appendix-A	List of Districts, Blocks, Gram Panchayats and Villages	82



Foreword

Necessity and Progress: Reporting on Bihar's Elementary Education

"Progress," it was argued by Herbert Spencer, "is not an accident, but a necessity." I think that claim is only half right. Progress is certainly not something that happens accidentally - we have to work for it. But a necessity need not generate progress unless we actually do work for it, and typically we have to plan it carefully too.

The expansion of primary education in Bihar has been a necessity for a very long time, and yet the signs of progress were rather rare - almost absent - through a long period of stagnation and decay. From the ancient times, when Bihar was the centre of Indian civilization, and when its educational achievements were the envy of the rest of the world, there has been a very long history of neglect and complacency about the growing educational backwardness of this state. It is with the recent efforts to plan - and to powerfully execute the planned programmes - that progress is, at last, reaching the resistant mass of Bihar's sluggish school education.

There are certainly many signs of change. The number of schools has jumped forward; the shortfall of teachers has come down sharply; attendance of students is definitely up; and the enrolment ratio has reached the comfortable figure of 98 per cent. This report can be seen as an informed celebration of the success that is at last being achieved.

And yet it is also a report on how much more needs to be done. There are still substantial incidences of teacher absenteeism; the number of teachers, especially of well-educated teachers, is still much below anything that can be called satisfactory; the school inspection system remains severely incomplete; and the participatory arrangement of Vidyalay Shiksha Samity (VSS) has become rather dysfunctional. There are other gaps and deficiencies to which this report draws attention, including the wide prevalence of reliance of primary school students on private tuition - outside the school - a fairly strong indictment of the quality and reach of the education that the schools provide.

To say that we have "some good news and some bad news" would, however, be an oversimplification. We do have that mixture of good and bad, of course, but no one expected that the long-standing problems of educational neglect in Bihar would disappear instantly. We have to see the extent to which the "bad news" is being noticed and addressed. There are some real sparks of hope there, to which we also draw attention, and which deserve appreciation. Along with that appreciation should also come encouragement to the educational authorities of Bihar to do more - indeed much more - than they have been able to do so far.

Progress not only calls for well-planned efforts, it also demands sustained commitment to try and enhance what has been achieved. It is the basis of, and the need for, that commitment that can be seen as the central message of this report. I feel very privileged to be able to present this report - a joint work of ADRI and the Pratichi Trust - to the people of Bihar.

Amartya K Sen

Acknowledgement

The Centre for Economic Policy and Public Finance (CEPPF) at the Asian Development Research Institute (ADRI), Patna and the Pratichi (India) Trust have been concerned seriously with the challenge of human resource development in India. The Trust, in particular, has been fulfilling an important social responsibility by preparing evaluative reports on the elementary education system in West Bengal, sensitising its stakeholders and enthusing them to strengthen it as well. Encouraged by this experience, the Trust and the CEPPF together have undertaken the present study which would hopefully impact, in the similar way, the stakeholders of the elementary education system in Bihar.

The study team would first like to express their deep sense of gratitude to Professor Amartya K Sen, Chair of the Trust, who had not only been relentlessly drawing public attention to the substantial human development deficits in India, but had also been instrumental in promoting academic efforts that can underline those deficits and identify the corrective steps to remove them. That a person like Professor Sen was keen on the study was itself an honour for the study team. We do not have words to express our gratitude not only for his advices and support, but also for agreeing to release the final report of the study.

The study, as mentioned above, is a joint effort of the Pratichi (India) Trust and the CEPPF at ADRI, Patna. This collaboration would not have materialised without the valuable cooperation of Ms Antara Dev Sen, Managing Trustee of the Trust and Dr Shaibal Gupta, Director of the CEPPF. We are aware that both of them share a deep commitment to the challenge of human development in India and, we are sure, with their respective visions, they would extend such efforts in future to make substantive contributions in the field of human development in general and elementary education in particular. We express our sincere gratitude to both of them. We are also indebted to the researchers and other staff of the Pratichi (India) Trust for their valuable inputs.

We have received valuable cooperation from many officials of the state government for providing the relevant secondary data, particularly Shree Rajesh Bhusan (IAS), the State Project Director of Bihar Education Project (BEP) Council. We express our sincere thanks to all of them. Finally, the study team would like to express their gratitude to all respondents from the sample villages — headmasters of the schools, knowledgeable persons and heads of households — for their cooperation. While apologising for the errors and omissions in this report, we earnestly solicit comments and suggestions from the readers, which will help us conduct similar surveys in the future.

Patna
July, 2011

Prabhat P Ghosh
Kumar Rana

List of Tables

- Table 1.1: Comparative socio-economic profile of Bihar, Uttar Pradesh, West Bengal and India
- Table 1.2: Comparative socio-economic profile of scheduled caste and Muslim population in Bihar, Uttar Pradesh, West Bengal and India
- Table 1.3: Structure of sample for survey
- Table 2.1: Literacy rates in India and Bihar (1961-2011)
- Table 2.2: District-wise literacy rates in Bihar (2011)
- Table 2.3: Distribution of districts by literacy rates (2011) and decadal increase (2001-2011)
- Table 2.4: Public expenditure in elementary education in Bihar (2001-02 to 2009-10)
- Table 2.5: District-wise number of primary and upper primary schools in Bihar (2005-06 and 2008-09)
- Table 2.6: District-wise number of teachers in Bihar (2005-06 and 2008-09)
- Table 2.7 : District-wise Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) for primary and upper primary classes in Bihar (2005-06 and 2008-09)
- Table 3.1: Information on school enrolment of children in 6-14 years age group
- Table 3.2: Percentage share of scheduled castes/tribes and Muslims in enrolment
- Table 3.3: Average enrolment and attendance in different classes
- Table 3.4: Percentage distribution of schools by reported reasons for difference between enrolment and attendance
- Table 3.5: Reasons for children missing school
- Table 3.6: Response of teachers to long absence of students
- Table 3.7: Learning achievements of students in Standard I and II
- Table 3.8: Average number of students passing the highest class last year and getting enrolled in next class
- Table 4.1: Profile of children (6-14 years)
- Table 4.2: Reasons mentioned for importance of education
- Table 4.3: Percentage distribution of parents by desired level of children's education
- Table 4.4: Information of teaching help received by children at home
- Table 4.5: Reasons for children not receiving any teaching help at home

Table 4.6:	Average annual private expenditure (in Rupees) on education per student
Table 5.1:	Information on attendance of children at Anganwadi centres
Table 5.2:	Information on accessibility to schools and admission formalities for school-going children
Table 5.3:	Infrastructural facilitation at schools
Table 5.4:	Information on teacher strength and teacher attendance in schools
Table 5.5:	Information on the extent of non-teaching work by teachers
Table 5.6:	Profile of teachers by sex, religious/caste background and secondary occupation
Table 5.7:	Profile of teachers by academic qualification and professional training
Table 5.8:	Information on problems faced by teachers
Table 5.9:	Information on additional difficulties faced by female teachers
Table 5.10:	Level of job satisfaction among teachers
Table 5.11:	Teaching methods used by teachers
Table 5.12:	Evaluation system in schools
Table 5.13:	Modes of punishment for students
Table 5.14:	Opinion of teachers about private tuition
Table 5.15:	Information on visits of education officials to schools
Table 5.16:	Information on parental evaluation of schools and teachers
Table 5.17:	Extent of coverage of various incentive schemes
Table 6.1:	Percentage distribution of schools by year of establishment of VSS
Table 6.2:	Percentage distribution of schools by process of formation of VSS
Table 6.3:	Profile of VSS members
Table 6.4:	Percentage distribution of schools by frequency of VSS meeting
Table 6.5:	Percentage distribution of schools by average attendance in their VSS meetings
Table 6.6:	Reasons for low attendance of different categories of members in VSS meeting
Table 6.7:	Frequency of discussion on different issues in VSS meeting
Table 6.8:	Percentage distribution of VSS by their most important activity

List of Figures

Figure 1: Literacy rates in India and Bihar (1961-2011)

Figure 2: Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) (2005-06 & 2008-09)

Figure 3: Percentage of attendance in primary and upper primary classes

Figure 4: Reported reasons for poor attendance

Figure 5: Parental education status of students

Figure 6: Nature of help received by students at home

Figure 7: Average annual private expenditure (in Rupees) on education per student

Highlights

Positive changes

- The availability of schools has now been doubled — number of schools per one lakh population has increased from 60.2 in 2005-06 to 107.3 in 2008-09.
- The overall enrolment ratio in elementary education is found to be extremely high — 98.1 percent for all children (6-14 years). Nearly 95 percent of the students are enrolled in government schools, the backbone of elementary schooling system in the state.
- There has been an advancement in teachers' recruitment in Bihar in recent years, bringing their strength to about 4.33 lakh. However, the total requirement of elementary school teachers in Bihar is at least 7.28 lakh, implying a shortfall of about 40.5 percent.
- Average attendance in a day is 61.6 percent of enrolment (as per the school level data) and 85.0 percent (as per the household survey). Based on these estimates, it appears that the average attendance rate is about 70-75 percent. It is an improvement over the past, but this needs to be improved further.

Constraints on the system

- The average number of classrooms in primary schools is only 2.8 for running five classes; in upper primary schools there are only 5.4 rooms for running eight classes.
- The average teacher strength in schools are — 3.6 teachers in primary schools and 7.1 teachers in upper primary schools. Taking into account teacher absenteeism, the 'effective' teacher strength in a day in schools is — 2.9 in primary schools and 5.4 in upper primary schools.
- In primary schools, only 43.4 percent of the teachers are graduates; even in upper primary schools, the share of graduate teachers is only 58.1 percent. The share of professionally trained teachers is 60.5 percent in primary schools and 70.9 percent in upper primary schools.
- The average absenteeism among the teachers, in the week prior to the field visit, was 17 and 24 percent, respectively, for the primary and upper primary schools.

- The overall quality of learning is still poor. The transition to higher classes is also low – only 40 and 65 percent for primary and upper primary schools, respectively.
- About 10 percent of the primary and 18 percent of upper primary schools were not at all visited by any official during the year prior to the survey.
- In most of the schools, the midday meal was served irregularly and there were wide complaints about the quality of the meals served. The coverage of other incentive schemes are — free textbooks (71.7 percent), free uniform (48.6 percent) and scholarship (45.9 percent).
- About all schools in the sample had a VSS, but most of them have completed their mandated term of three years. In the absence of fresh elections, these bodies are now dysfunctional.

Challenges for strengthening elementary education

- About 60 percent of all the school-going children are first-generation learners and need some teaching help at home. But they are not able to receive it, neither from parents/relatives or from private tutors. One out of four boy students in elementary classes has a private tutor, but for girl students it was available for only one out of 10.
- A large section of teachers thought private tuition to be desirable. In other words, these teachers are quite aware of the inadequacy of learning inputs that the students are able to acquire at their schools.
- The inclination towards private tuition is nothing but the reflection of an elevated aspiration of parents to acquire quality education by their children. This higher demand is both an opportunity and a challenge for the state education sector for an equitable delivery of quality elementary education by abolishing the socio-economic gaps therein.
- The gender differences in educational opportunities are substantial in Bihar. It is reflected in the lower level of education desired by parents for girls, lower rate of school attendance and lower private expenditure on girls' education.

CHAPTER I

Introduction

Yudhisthira, if asked today, would probably be confused to answer that question of Yaksha – what is the greatest wonder? His original answer – despite the inevitability of death, people don't want to die – would have been competed by a single word, a proper noun, that is *Bihar*. It is the land which once flourished during as early as 5th century; this is where Nalanda, a centre of excellence, had existed; and a scientist of Aryabhata's stature had pursued his mathematical and astronomical interests in this land. In the arena of statecraft, it was the kingdom where the royal messages used to be conveyed to the public through edicts which, according to Jawaharlal Nehru, "speaks to us in a language that we can understand and appreciate". Even after the destruction of Nalanda, the connection of the land with academic activities had indeed continued — Abul Fazal-i-Allami, in his monumental work *Ain-i-Akbari*, mentions "Good paper is manufactured here [in Rajgir]". With this glorious history, would it not make Yudhisthira wonder how this land of profound academic tradition is now reduced to a state where more than one-third of its population is simply devoid of letters? Even more painful is to see that nearly half of the women suffer from that basic infirmity.

Among all the Indian states, it is Bihar where the literacy rate is the lowest. The 2011 census has recorded the literacy rate to be only 63.8 percent, compared to 74.0 percent for the entire country. What makes the literacy scenario even worse is the wider gender disparity in literacy rates. While for the entire country, the female literacy rate (65.9 percent) is 16.2 percent less than the male literacy rate (82.1 percent), for Bihar the gap is 19.2 percent (73.4 percent for males and 54.2 percent for females). The only ray of hope in this otherwise depressing scenario is the faster spread of literacy in Bihar during 2001-11 than in India as a whole. The overall literacy rate in Bihar has increased by 17 percentage points during the last decade, compared to 9 percentage points for the entire country. But in spite of this better performance during the last

decade, literacy rate is still the lowest in Bihar. If Bihar is able to maintain its present momentum in educational progress, it will hopefully achieve total literacy in about two decades, simultaneously with the rest of the country.

The depressing situation about the state of literacy in Bihar is the accumulated impact of long neglect of education by the government. During the British rule, Bihar was one of the major seats of First War of Independence in 1857 and, consequently, the colonial rule was more oppressive here than in most parts of India. The neglect of education by the colonial administration in Bihar was one part of that oppression. The problem was further compounded because, in their eagerness to avoid anything colonial, the people of Bihar had also avoided formal schooling which was first started by the British administration, albeit on a limited scale. In addition, the entrenchment of the feudal forces through the institution of Permanent Settlement by the colonial administration had also severely deterred the spread of education in Bihar. The feudal lords, interested as they were only in collection of rent, were not interested even in economic development of their respective areas leave alone any social development through spread of literacy. Unfortunately, even after independence, the colonial trend was allowed to continue through a development strategy which, instead of reducing, had indeed enhanced regional economic and social disparity through resource allocations that favoured the already-developed regions, pushing the disadvantaged states like Bihar further behind, both economically and socially.

In the context of educational development, one might note that even for the country as a whole, its pace has been very slow. During the first 50 years after independence, the literacy rate in India has increased by only 48.1 percentage points — from 16.7 percent in 1951 to 64.8 percent in 2001, an increase of hardly one percentage point every year. In Bihar, the progress was even slower. This trend probably suggests that education has generally been a neglected field both in Bihar and India as a whole. Among the factors that caused such neglect, it is probably the planners' perspective on education - that is why education is important - that stands out as the most relevant one. Broadly speaking, this perspective characterises education to be a social

welfare programme, to be shouldered by the state till economic development reaches a sufficiently high level, enabling people to arrange and pay for their own educational needs. Obviously, within this flawed perspective, the government has been shouldering that responsibility rather reluctantly, and education, as such, received a much less priority than was necessary to transform the sector whose earlier development was dictated by colonial policies.

There seems to have been some change in that perspective in recent years and, consequently, the central and state governments together are paying an enhanced attention to the education sector, particularly promoting elementary education for the children in 6-14 years age-group through the Sarva Shiksha Abhiyan (SSA). This changed perspective can possibly be attributed to two important dimensions of education. First, education has now been recognised as a great equaliser of opportunities between rich and poor, and between men and women. This is a welfare gain of education which could make substantial contribution towards making growth an inclusive phenomenon. Secondly, it is also now realised that by providing adequate education and health services a developing country can raise its human development to a level where it is able to 'propel' economic growth, not just sustain it once it has been generated by other forces. As a logical extension of this possibility, it is necessary to favour human resource investment 'beyond' what would occur in the natural course of development.

Fortunately, apart from SSA, which was started in 2000-01 throughout the country including Bihar, the elementary education system had received another fillip in the form of Midday Meal Scheme (MDMS) which had become universal in 2005. Although these two ambitious programmes had provided substantial additional support to different states for strengthening their elementary education systems, it had hardly made any impact in Bihar for various reasons: particularly lack of political will. However, after the installation of a new government in 2005, some serious efforts to strengthen the elementary education system in Bihar had started in 2006-07. The intention of the new state government was first expressed through the constitution of a Commission on Common Schooling System in August, 2006. The objective of the commission was to prepare a plan of action for implementing a Common Schooling System in the state which will ensure universalisation of elementary education by 2012-13. The commission had submitted

its report in June, 2007. Apart from recommending norms and standards for equitable quality education for all children in the state and a system of teacher education, the report had also estimated the financial resources needed for implementing the Common Schooling System. Unfortunately, the state government did not accept the recommendations of the commission, one of the reasons being that its financial resources were not adequate to implement those recommendations in total. But starting from the year 2006-07, the state government had made a number of major interventions in the elementary education system and some encouraging results were reported after about two years by the Bihar Education Project (BEP) which manages the elementary education system in the state. The findings of 2011 census also substantiate those encouraging results, the state recording an increase of 17 percentage points in overall literacy rate and 21 percentage points in female literacy rate.

The present momentum in the progress of literacy in Bihar can be maintained only when the elementary education in the state is widened and strengthened further. It was, thus, desirable to undertake a study not only to know the current status of elementary education in Bihar, but to identify its crucial deficiencies as well. In this background, the present study, based on primary data collected from rural areas, is an attempt to:

- (a) prepare an operational profile of primary and upper primary schools in Bihar in terms of their resource base (physical and manpower) as well as reach and quality of their services;
- (b) identify the organisational, social and infrastructural constraints that are operating on the elementary education system; and
- (c) analyse the role of various stakeholders of the elementary education system in promoting education in the state.

The field survey for the study was carried out in five sample districts of Bihar — Bhojpur, Gopalganj, Bhagalpur, Madhubani and Katihar, and the details about the choice of districts and sampling design are presented later.

Socio-economic profile of Bihar

With a population of 103.8 million in 2011, Bihar is the third most populous state in India, next only to Uttar Pradesh and Maharashtra (Table 1.1). If we compare the socio-economic profile of Bihar with two of its neighbouring states - Uttar Pradesh and West Bengal - it clearly emerges that the state is highly disadvantaged in many respects. First, the huge population of Bihar would not have been a problem if some of its other demographic characteristics were to its advantage. But that is not the case. For example, the density of population here is very high, as it is for Uttar Pradesh and West Bengal, since they are all in the fertile Gangetic plain; but whereas West Bengal has already been able to lower its population growth rate in the last two decades, both Uttar Pradesh and Bihar are yet to experience any demographic transition. During 2001-11, the decadal growth rates for population in these three states were 25.1 percent (Bihar), 20.1 percent (Uttar Pradesh) and 13.9 percent (West Bengal). In terms of urbanisation, Bihar is again highly disadvantaged; only 10.7 percent of its population is living in urban areas (2001 census). Indeed, the status of urban infrastructure is so poor in Bihar that many of the smaller towns are indeed large villages. Consequently, urbanisation level in Bihar (as indicated by the census figures) is a rather over-estimate. As per 2011 census, Bihar also suffers from a low sex ratio, only 916 females per 1000 males, compared to 940 for the entire country. However, the child sex ratio in Bihar (933) is much higher than the national figures (914).

As regards the social composition of the population, one notes that of the three socially disadvantaged population groups — Muslims, Scheduled Castes and Scheduled Tribes — the last category is nearly absent in Bihar. The combined share of these three groups is 33.1 percent in Bihar, compared to 39.8 percent in Uttar Pradesh and even higher at 53.7 percent for West Bengal. From these figures one is tempted to conclude that the burden of highly disadvantaged social groups is relatively less in Bihar. But from the data on the occupational distribution of workers, it emerges that nearly half of the workers in Bihar (48.0 percent) are landless agricultural labourers; the corresponding shares for Uttar Pradesh and West Bengal are 24.8 and 25.0 percent, respectively. While in Uttar Pradesh a large portion of workers are cultivators (41.1 percent), West Bengal has its relatively larger industrial sector to accommodate its workers (37.6

percent). Thus, the share of disadvantaged population in Bihar, taking into account landlessness and religious/caste background both, is very high, certainly higher than in Uttar Pradesh.

Table 1.1: Comparative socio-economic profile of Bihar, Uttar Pradesh, West Bengal and India

Characteristics	Bihar	Uttar Pradesh	West Bengal	India
Demographic (2011)				
Population (million)	103.8	199.6	91.3	1210.2
Decadal Growth Rate of Population (2001-11)	25.1	20.1	13.9	17.6
Density of Population (person/sq km)	1102	828	1029	382
Female-Male Ratio (FMR) (2011)				
Overall	916	908	947	940
0-6 Years	933	899	950	914
Urbanisation Rate (%) (2001)	10.7	20.8	28.0	27.8
Literacy Rate (2011)				
Male	73.4	79.2	82.7	82.1
Female	54.2	60.2	71.5	65.9
Person	63.8	69.7	77.1	74.0
Social Composition of Population (2001)				
Percentage of Muslims	16.5	18.5	25.2	13.4
Percentage of Scheduled Caste	15.7	21.2	23.0	16.2
Percentage of Scheduled Tribe	0.9	0.1	5.5	8.2
Total	33.1	39.8	53.7	37.8
Occupational Distribution of Workers (2001)				
Cultivators	29.3	41.1	19.2	31.7
Agricultural Labourers	48.0	24.8	25.0	26.5
Household Industry	3.9	5.6	7.4	4.2
Other Workers	18.8	28.5	48.4	37.6
Total	100.0	100.0	100.0	100.0
Economic (2007-08)				
Per Capita NSDP (at Current Prices) (Rs.)	11074	16060	32065	33283
Share of Agriculture & Allied in GSDP / GDP	25.8	28.8	22.6	18.0
Population Below Poverty Line (Rural) (%) (2004-05)	55.7	42.7	38.2	41.8
Population Below Poverty Line (Urban) (%) (2004-05)	43.7	34.1	24.4	25.7

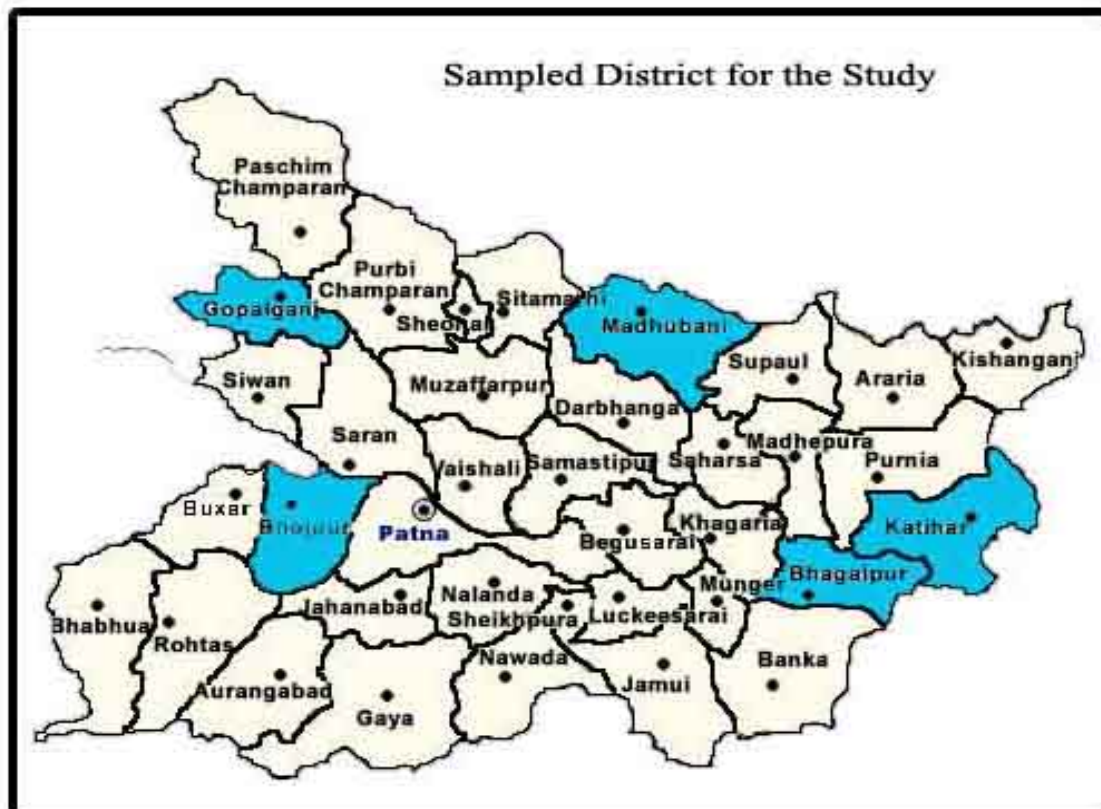
Source: Central Statistical Organisation (CSO)

That the socially disadvantaged sections of the population in Bihar are even more disadvantaged than their counterparts in Uttar Pradesh and West Bengal is also evident from the demographic profile of Scheduled Castes in these three states (Table 1.2). The overall literacy rate (2001 census) for the Scheduled Caste is only 28.5 percent, less than half the rate in West Bengal (59.0 percent) and slightly more than half in Uttar Pradesh (46.3 percent). Again, the phenomenon of landlessness is extremely wide among the Scheduled Castes in

Table 1.2: Comparative socio-economic profile of Scheduled Caste and Muslim population in Bihar, Uttar Pradesh, West Bengal and India (2001 Census)

Characteristics	Bihar	Uttar Pradesh	West Bengal	India
Scheduled Caste				
Population (million)	13.05	35.15	18.45	166.64
Share in Total Population (%)	15.7	21.1	23.0	16.2
Female-Male Ratio				
Overall	923	900	949	936
0-6 Years	963	930	958	938
Literacy Rate				
Male	40.2	60.3	70.5	66.6
Female	15.6	30.5	46.9	41.9
Persons	28.5	46.3	59.0	54.7
Occupational Distribution of Main Workers				
Cultivators	8.7	39.5	20.3	22.1
Agricultural Laborers	75.4	30.0	31.9	39.2
Household Industry	3.2	4.4	5.3	3.7
Other Workers	12.7	26.0	42.6	35.1
Total	100.0	100.0	100.0	100.0
Muslim				
Population (million)	13.72	30.74	20.24	138.18
Share in Total Population (%)	16.53	18.50	25.24	13.43
Female-Male Ratio				
Overall	943	918	933	936
0-6 Years	958	935	968	950
Literacy Rate				
Male	51.8	57.3	64.6	67.6
Female	31.5	37.4	49.8	50.1
Persons	42.0	47.8	57.5	59.1
Occupational Distribution of Main Workers				
Cultivators	19.8	25.7	20.3	20.7

Agricultural Labourers	51.5	21.6	26.6	22.0
Household Industry	5.8	11.9	12.6	8.1
Other Workers	22.8	40.7	40.5	49.1
Total	100.0	100.0	100.0	100.0



Bihar, about three-fourths of them falling in the category; in contrast, a substantial number of them are land-owning cultivators or non-agricultural workers in Uttar Pradesh and West Bengal. A comparison of the socio-economic status of Muslims in Bihar with their counterparts in Uttar Pradesh and West Bengal again indicates that the Muslims in Bihar are more disadvantaged. The literacy rate for Muslims in Bihar (42.0 percent) is lower than in Uttar Pradesh (47.8 percent) and West Bengal (57.5 percent). Further, no less than 51.6 percent of the Muslim main workers in Bihar are agricultural labourers, compared to 21.6 percent in Uttar Pradesh and 22.0 percent in West Bengal. An idea about the economic disadvantage of Bihar can be obtained from its Per Capita Income (at current prices) which stood at Rs. 11,074 at 2007-08, barely one-third of the national average at Rs. 33,283. Secondly, the share of population below poverty line in 2004-05 in Bihar was 55.7 percent (rural) and 43.7 percent (urban). These figures are not only much

higher than in West Bengal, a middle income state, but substantially higher than in Uttar Pradesh, a low income state.

Sampling design of the study

To serve a population of about 103.8 million in 2011, spread over 45.1 thousand villages and 130 towns, Bihar has 79.8 thousand primary schools and 27.2 thousand upper primary schools. A comprehensive survey of these schools obviously requires a large scale sample survey. But for identifying the crucial changes that had taken place in the elementary education system in the recent past and also locate some of its critical deficiencies, it was thought that a small scale survey might be at least useful, if not adequate. The results of the survey indeed vindicate that assumption.

In view of the available time and financial resources, it was decided to conduct the survey in five districts of the state, out of the 38 comprising ones. Based on a study by the Asian Development Research Institute (ADRI) which had divided 38 district of Bihar into five development zones, the present study had selected one district from each zone — Bhojpur (Much above average), Bhagalpur (Above average), Gopalganj (Average), Madhubani (Below average) and Katihar (Much below average). In the second step of sampling, two blocks were chosen from each district, one close to the district headquarters and the other much away. In the third stage, three *Gram Panchayats* were chosen randomly from each sample block and one village was chosen again randomly from each *Gram Panchayat*, yielding a total sample of 30 villages. In the final stage, the sample comprised 31 schools in 30 villages (only one village had two schools) and 900 households (30 randomly chosen households from each of 30 villages, out of those which had at least one child in 6-14 years age-group). The obvious intention was to collect the relevant information on elementary education from both the schools (provider of the services) and the households (recipient of the services). In addition to the School and Household Schedules, this survey had also canvassed a VSS (Vidyalay Shiksha Samity) and Village Schedule. Thus, the information base of the present survey had 31 schools and 900 households (Table 1.3). Within the Household Schedule, the survey has also collected education-related information on 1,948 children (6-14 years). The list of districts, blocks, *Gram Panchayats* and villages is presented in Appendix A.

Table 1.3: Structure of the sample for survey

District	No. of villages	No. of schools	No. of households	No. of children (6-14 Years)
Bhojpur	6	6	183	416
Gopalganj	6	6	181	426
Bhagalpur	6	7	182	357
Madhubani	6	6	183	350
Katihar	6	6	179	399
Total	30	31	908	1948

Plan of the report

This study report is divided into seven chapters. After this 'Introductory' Chapter, Chapter II describes the literacy rates and elementary education in Bihar, based on secondary data. The next four chapters present the findings of the primary survey — Child Enrolment in Schools: Progress and Challenges (Chapter III), Parental Background: Social Segmentation in Education (Chapter IV), Functioning of Schools: Infrastructures, Teaching Personnel and Incentive Schemes (Chapter V), and Participation in School Governance (Chapter VI). Finally, Chapter VII collects the main findings of the study which will hopefully provide some useful feedback to the state government and other stakeholders to improve the elementary education system in Bihar.

CHAPTER II

Elementary Education in Bihar: An Overview

At the time of independence, the undivided Bihar (i.e. including Jharkhand) had about 20 thousand primary schools and 15 hundred upper primary schools, constituting its elementary education system. It was obviously too inadequate for a population of about 36 million at that time. However, during the first three decades after independence, there was a substantial expansion of the elementary education system in Bihar, as in the rest of India. By 1976-77, the number of primary schools had increased about two-and-a-half times to 51.2 thousand; for upper primary schools, the expansion was even faster with 10.4 thousand of them functioning in that year, implying a seven-fold increase. There was a major change in the educational policy in 1976 when the state government had taken over all primary and upper primary schools. This was followed by another major change in 1980 when all secondary schools were also taken over by the state government. Thereafter, mainly because of resource constraints, the expansion of the elementary education system in Bihar has been much slower during the eighties and nineties. This scenario has started changing since 2000-01 when Sarva Shiksha Abhiyan (SSA) was launched throughout the country, including Bihar, through some additional resource transfers from the Centre to various state governments. This chapter presents an overview of the current status of elementary education system in Bihar, based on secondary data. However, before presenting that overview, it is desirable to know the existing literacy scenario in the state to indicate the huge dimension of the educational gap which the elementary education system is expected to bridge.

Literacy rates in Bihar

The literacy rates in Bihar, primarily because of discriminatory government policies, have been lower than the national average all along. Taking into account the re-organisation of states in 1956 and its bifurcation in 2000, we have computed the comparable literacy rates of present

Bihar and India from 1961 census onwards (Table 2.1). It is interesting to note from the table that while the difference between the all-India and Bihar literacy rates was only 4.9 percentage points in 1961, it gradually increased to 18.2 percentage points by 2001. Fortunately, the spread of literacy during the last decade (2001-2011) has been faster in Bihar than in India as a whole, reducing the gap in literacy rates to 10.2 percentage points. The overall trend, however, clearly shows how the colonial trend was allowed to perpetuate in the post-independence period. One reason for this ever widening gap between the literacy rates in Bihar and India is economic.

Table 2.1: Literacy rates in India and Bihar (1961-2001)

Decade	India			Bihar		
	Male	Female	Persons	Male	Female	Persons
	Literacy Rates					
1961	40.4	15.3	28.3	37.9	8.7	23.4
1971	46.0	22.0	34.5	38.3	10.7	24.9
1981	56.4	29.8	43.6	46.8	16.6	32.3
1991	64.1	39.3	52.2	51.2	22.0	37.5
2001	75.9	54.2	65.4	59.7	33.4	47.2
2011	82.1	65.5	74.0	73.4	53.3	63.8
Decadal Increase						
1961-71	5.6	6.7	6.2	0.4	2.0	1.5
1971-81	10.4	7.8	9.1	8.5	5.9	7.4
1981-91	7.7	9.5	8.6	4.4	5.4	5.2
1991-01	11.8	14.9	13.2	8.5	11.4	9.7
2001-11	6.2	11.3	8.6	13.7	19.9	16.6

Source: Census report of relevant years

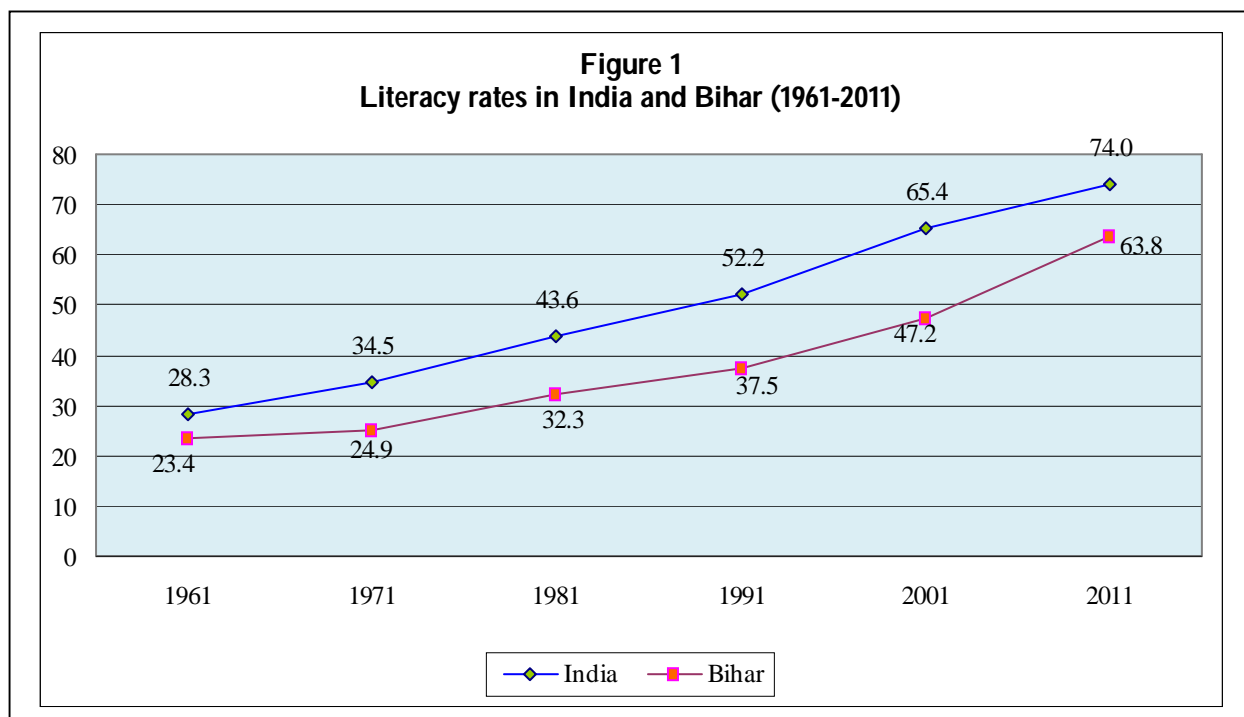


Table 2.2 : District-wise literacy rates in Bihar (2011)

Division / District	2011						Decadal Increase (2001-11)					
	M	R	F	R	P	R	M	R	F	R	P	R
Patna												
Patna	80.3	8	63.7	3	72.5	5	4.1	38	10.7	38	7.0	38
Nalanda	77.1	13	54.8	20	68.4	12	10.0	33	15.5	36	14.4	29
Bhojpur	84.1	2	60.2	6	72.8	3	8.4	36	17.3	31	12.5	35
Buxar	82.8	3	59.8	7	71.8	6	10.1	31	19.1	25	14.1	31
Rohtas	85.3	1	65.0	2	75.6	1	9.4	34	18.7	27	13.7	33
Kaimur	81.5	6	59.6	8	71.0	8	12.3	25	20.8	19	16.1	23
Magadh												
Gaya	76.0	16	55.9	17	66.3	15	12.3	26	18.7	26	15.3	25
Jehanabad	79.3	11	56.2	15	68.3	13	9.3	35	15.4	37	12.2	36
Arwal	81.3	7	56.8	12	69.5	9	10.1	32	17.0	33	13.3	34
Nawada	71.4	25	51.1	23	61.6	23	10.5	30	18.5	28	14.3	30
Aurangabad	82.5	5	62.0	4	72.8	4	11.1	29	19.4	24	15.2	26
Saran												
Saran	79.7	10	56.9	11	68.6	10	12.5	24	20.4	22	16.3	22
Siwan	82.8	4	60.3	5	71.6	7	16.6	8	22.5	9	19.7	7
Gopalganj	78.4	12	56.0	16	67.0	14	15.9	13	23.2	8	19.2	10
Tirhut												
W. Champaran	68.2	29	46.8	31	58.1	30	17.6	6	21.8	13	19.5	8
E. Champaran	68.0	30	47.4	28	58.2	29	19.2	3	23.3	4	21.0	3
Muzaffarpur	73.6	20	56.8	13	65.7	18	14.3	19	20.4	21	17.2	21
Sitamarhi	62.6	36	43.4	35	53.5	37	13.5	23	17.2	32	15.1	27
Sheohar	63.7	35	47.2	29	56.0	32	18.6	4	23.2	6	20.7	4
Vaishali	77.0	14	59.1	9	68.6	11	13.6	22	22.0	11	17.7	17
Darbhanga												
Darbhanga	68.6	27	46.9	30	58.3	28	11.9	28	15.7	35	13.7	32
Madhubani	72.5	22	48.3	26	60.9	24	16.0	11	21.7	15	18.8	13
Samastipur	73.1	21	53.5	21	63.8	21	16.1	10	21.7	14	18.8	12
Munger												
Begusarai	74.1	17	57.1	10	66.2	16	15.4	16	21.9	12	18.1	15
Munger	80.1	9	65.5	1	73.3	2	8.2	37	16.4	34	11.9	37
Sheikhpura	76.1	15	54.9	18	66.0	17	14.6	17	21.1	16	17.6	18
Lakhisarai	74.0	18	54.9	19	65.0	19	13.9	21	21.0	17	17.3	19
Jamui	73.8	19	49.4	24	62.2	22	16.2	9	23.4	3	19.3	9
Khagaria	68.5	28	52.2	22	60.9	25	17.5	7	23.3	5	20.1	6
Bhagalpur												
Bhagalpur	72.3	23	56.5	14	65.0	20	12.1	27	18.0	29	14.8	28
Banka	69.8	26	49.4	25	60.1	26	14.3	18	20.7	20	17.2	20
Koshi												
Saharsa	65.2	32	42.7	37	54.6	34	14.2	20	17.4	30	15.7	24
Supaul	71.6	24	46.6	32	59.6	27	19.9	2	25.8	2	22.6	2
Madhepura	63.8	34	42.7	38	53.8	35	15.9	14	20.8	18	18.2	14
Purnea												

Purnea	61.1	37	43.2	36	52.5	38	16.0	12	20.1	23	17.8	16
Kishanganj	65.6	31	48.0	27	57.0	31	24.0	1	29.6	1	26.5	1
Araria	64.1	33	45.2	34	55.1	33	18.5	5	23.2	7	20.7	5
Katihar	61.0	38	45.4	33	53.6	36	15.5	15	22.0	10	19.1	11
Total	73.4		53.3		63.8		13.7		19.9		16.6	

(Abbreviations: M- Male, F- Female, R- Rank, P- Persons)

Source: Census reports 2001 and 2011

At one end, the low level of income of the population does not leave much scope for private expenditure on education; at the other end, the financial resources of the state government, again because of low income levels, is rather limited, leading to low public expenditure on education. Together with this economic reason, an important social reason for much slower progress of literacy in Bihar is the gender gap in literacy in early years. In 1961, the female literacy rate in India (15.3 percent) was a little more than one-third of the male literacy rate (40.4 percent); in contrast, the female literacy rate in Bihar (8.7 percent) was less than one-fourth of the male literacy rate (37.9 percent). By 2011, this gender gap has been narrowed both in India and Bihar, but it is still wider in Bihar.

Besides the gender gap, the literacy scenario in Bihar is also characterised by wide regional disparities (Table 2.2). Around the overall literacy rate of 63.8 percent for the state in 2011, the district-wise literacy rates vary from 75.6 percent (Rohtas) to 52.5 percent (Purnea). There are as many as five districts where the literacy rates are below 55 percent, which was the all-India rate about two decades ago. Broadly speaking, the ranking of districts with respect to literacy rates, either overall or gender-specific, indicate that the districts south of the Ganges are better off than those located north of the river. Besides the literacy rates, the educational status of a district should also be judged in terms of the progress it has made in the recent past. It is not unusual for an advanced district to fall behind, because of slower progress; similarly, lagging district may also hope for a better future because of a spurt in its educational growth, due to some social or economic impetus. In this backdrop, Table 2.3 presents a classification of 38 districts of Bihar in terms of their literacy rates in 2011 and the decadal increase in those rates during 2001-2011. Interestingly, one can identify from the table a number of districts which are advanced but had shown slower progress during the last decade (Patna, Nalanda, Bhojpur, Buxar, Jehanabad, Arwal and Munger); similarly, there are districts which are disadvantaged but had shown a faster progress in the last decade (Madhepura and Katihar). Since most districts from the first group are in the south of the Ganges and those from the second group are to the north, the inter-district disparity has been reduced to some extent during the last decade. It is very encouraging to note that the district recording the highest decadal increase in literacy rate is Kishanganj, where the

Muslims constitute the majority population. This negates the view that the demand for education among the Muslim is much lower.

A comparison of the districts with respect to female literacy rates also indicates wide variations in those rates — ranging from the highest in Munger (65.5 percent) to the lowest in Saharsa and Madhepura (42.7 percent). There are as many as 15 districts in Bihar (all but three of them in north Bihar) where the female literacy rate is less than 50 percent. In the face of a high demand for literacy, even among the disadvantaged population including the scheduled castes and Muslims, the regional disparity in literacy rate is basically due to poor educational infrastructure in many of the districts.

Table 2.3 : Distribution of districts in Bihar by literacy rates (2011) and decadal increase in literacy rate (2001-2011)

Literacy Rate (2011)	Decadal Increase in Literacy Rate (2001-2011)		
	Above 18 percentage points	Between 15-18 percentage points	Below 15 percentage points
Above 65 percent	Siwan/ Gopalganj/ Begusarai	Kaimur/ Gaya/ Aurangabad/ Saran/ Muzaffarpur/ Vaishali/ Sheikhpura/	Patna/ Nalanda/ Bhojpur/ Buxar/ Rohtas/ Jehanabad/ Arwal/ Munger
55-65 percent	West Champaran/ East Champaran/ Sheohar/ Jamui/ Khagaria/ Supaul/ Kishanganj/ Araria	Lakhisarai/ Banka	Nawada/ Darbhanga/ Madhubani/ Samastipur/ Bhagalpur
Below 55 percent	Madhepura/ Katihar	Sitamarhi/ Saharsa/ Purnea	

Source: Based on Table 2.2

Elementary education system

After experiencing some fast expansion during the first three decades after independence, the elementary education system in Bihar had grown very slowly during the 80s and 90s. With the inception of Sarva Shiksha Abhiyan (SSA) in 2000-01, the system was expected to expand again, but the state government was not able to fully utilise the additional financial support of the central government in the initial years and the progress of SSA was rather slow in Bihar in the first five years. With a change in the state government in 2005, there was a perceptible shift in the priorities of the state government, allowing for a more serious attention and larger resources for the elementary education sector in the state. Compared to an annual average expenditure of Rs. 1688.9 crore (2001-02 to 2003-04) on elementary education, it rose to Rs. 3961.4 crore

during the last three years (2007-08 to 2009-10) (Table 2.4). After allowing for inflation, this implied more than doubling of expenditure on this important social sector. Fortunately, the state government was able to considerably improve its resource position during this period; as such, the expenditure on elementary education could increase without any substantial increase in its share either in total expenditure or expenditure on education.

Table 2.4: Public expenditure on elementary education in Bihar (2001-02 to 2008-09)

Year	Total Public Expenditure (Rs. crore)	Expenditure on Education		Expenditure on Elementary Education		
		Amount (Rs. crore)	Percentage Share in Total Expenditure	Amount (Rs. crore)	Percentage Share in	
					Total Expenditure	Expenditure on Education
2001-02	18882.3	2448.9	13.0	1585.1	8.4	64.7
2002-03	15505.5	2672.8	17.2	1731.5	11.7	64.8
2003-04	22481.9	2777.6	12.4	1750.1	7.8	63.0
2004-05	20058.0	3091.9	15.4	1945.8	9.7	62.9
2005-06	22568.5	4337.1	19.4	3007.4	13.3	68.5
2006-07	27136.5	5203.8	19.2	2907.9	10.7	55.9
2007-08	31571.1	5435.6	17.2	3280.5	10.4	60.4
2008-09	37181.2	6641.0	17.2	3772.4	9.8	56.8
2009-10	42796.0	7348.6	17.2	4831.3	11.3	57.6

Source: Annual Budgets, Government of Bihar, of relevant years

One of the most important priorities of the state government for strengthening the elementary education sector was to increase the number of schools and teachers. In case of schools, the expansion had two components — first, establishment of new primary schools in unserved villages or urban wards and second, upgrading some of the existing primary schools to start upper primary classes. The district-wise information on this school expansion programme is presented in Table 2.5. To begin with, it should be first noted that within just three years, the availability of elementary education schools (primary and upper primary) was just doubled — number of schools per one lakh population had increased from 60.2 in 2005-06 to 107.3 in 2008-09. When one considers the primary and upper primary schools separately, it is noted that the expansion of upper primary schools was larger — compared to 2.1 thousand upper primary schools in 2005-06, there were 20.8 thousand upper primary schools in 2008-09, implying a ten-fold increase. Much of this increase in upper primary schools was through upgradation of some primary schools to upper primary schools. This urgency for upgrading some of the primary schools to upper primary ones was to prevent a large number of dropouts between Standards V and VI, because of the non-availability of an upper primary school within a manageable distance in many villages. The increase in the number of primary schools, on the other hand, was only 48.4 percent between 2005-06 and 2008-09, since the number of villages or urban wards without

a nearby primary school was rather limited. From the district-wise figures on expansion of schools, one can also notice that the wide inter-district disparity in availability of schools was considerably reduced by 2008-09. A number of districts in north Bihar (like Purnea, Kishanganj, Araria and Katihar) where availability of schools was particularly low had experienced a faster increase in the number of schools, both primary and upper primary.

Table 2.5: District-wise number of primary & upper primary schools in Bihar (2005-06 and 2008-09)

Division / District	2005-06				2008-09			
	No. of Schools			No. of schools per 1 lakh population	No. of Schools			No. of schools per 1 lakh population
	Primary	Upper Primary	Total		Primary	Upper Primary	Total	
Patna								
Patna	3240	180	3420	67.4	7611	1133	8744	164.4
Nalanda	1822	108	1930	75.7	2191	707	2898	108.5
Bhojpur	1596	81	1677	69.5	2278	589	2867	113.3
Buxar	885	56	941	62.4	1307	359	1666	105.4
Rohtas	1644	126	1770	67.2	2131	347	2778	100.3
Kaimur	908	47	955	68.9	1213	392	1605	110.7
Magadh								
Gaya	2539	103	2642	70.7	3287	970	4257	108.6
Jehanabad	1057	63	1120	68.8	1430	450	1880	109.9
Arwal	NA	NA	NA	NA	NA	NA	NA	NA
Nawada	1217	28	1245	64.0	1681	527	2208	108.2
Aurangabad	1531	85	1616	74.6	2286	633	2919	128.6
Saran								
Saran	1920	103	2023	57.9	2961	793	3754	102.2
Siwan	1513	84	1597	54.7	2135	679	2814	92.0
Gopalganj	1175	67	1242	53.6	2220	546	2766	113.8
Tirhut								
W. Champaran	1816	84	1900	44.8	2837	764	3601	80.9
E. Champaran	2192	107	2299	70.2	3717	966	4683	136.5
Muzaffarpur	2642	50	2692	66.8	3218	994	4212	99.5
Sitamarhi	1412	64	1476	51.2	2099	631	2730	90.1
Sheohar	295	2	297	53.5	439	130	569	98.0
Vaishali	1630	1	1631	55.8	2521	678	3199	104.2
Darbhanga								
Darbhanga	1755	102	1857	52.4	3143	678	3821	102.7
Madhubani	2442	151	2593	67.4	2960	820	3780	93.8
Samastipur	1812	79	1891	51.8	2518	775	3293	86.0
Munger								
Begusarai	1166	2	1168	46.2	1839	487	2326	87.8
Munger	896	81	977	79.8	1366	316	1682	131.5
Sheikhpura	465	1	466	82.4	578	150	728	123.3
Lakhisarai	494	46	540	62.6	878	215	1093	120.1
Jamui	961	0	961	63.9	1490	447	1937	122.6
Khagaria	698	8	706	51.3	1197	333	1530	106.3
Bhagalpur								
Bhagalpur	1396	21	1417	54.4	2202	602	2804	102.7
Banka	1431	16	1447	83.6	1982	587	2569	141.1
Koshi								
Saharsa	780	28	808	49.8	1312	402	1714	100.8
Supaul	1043	46	1089	58.4	1793	475	2268	115.8
Madhepura	1025	15	1040	63.3	1520	362	1882	108.4

Purnea								
Purnea	1251	0	1251	45.7	2098	474	2572	89.6
Kishanganj	648	1	649	46.6	1445	215	1660	113.7
Araria	1131	33	1164	50.1	1896	424	2320	95.0
Katihar	1228	53	1281	49.8	2002	421	2423	89.8
Bihar	51656	2122	53778	60.2	79781	20771	100552	107.3

Note : Arwal figures are included in Jehanabad

Source : Bihar Education Project Council ([http : bspssa.org / components.htm](http://bspssa.org/components.htm))

Table 2.6 : Districtwise Number of Teachers in Bihar (2005-06 and 2008-09)

Division / District	2005-06		2008-09		Percentage of Female Teachers
	Total No. of Teachers	Avg. No. of Teachers per school	Total No. of Teachers	Avg. No. of Teachers per school	
Patna					
Patna	10818	3.16	12247	1.40	36.0
Nalanda	6565	3.40	6952	2.40	33.9
Bhojpur	3850	2.30	8607	3.00	34.2
Buxar	2550	2.71	6053	3.63	27.0
Rohtas	7989	4.51	8503	3.06	43.0
Kaimur	4691	4.91	5724	3.57	39.6
Magadh					
Gaya	9733	3.68	10583	2.49	25.0
Jehanabad	4470	3.99	6702	3.56	38.4
Arwal	NA	NA	NA	NA	NA
Nawada	3206	2.58	6345	2.87	NA
Aurangabad	6562	4.06	8122	2.78	NA
Saran					
Saran	5831	2.88	14539	3.87	57.9
Siwan	7837	4.91	11637	4.14	53.4
Gopalganj	6268	5.05	8821	3.19	33.8
Tirhut					
W. Champaran	6754	3.55	10948	3.04	31.8
E. Champaran	10174	4.43	14405	3.08	37.8
Muzaffarpur	12313	4.57	15046	3.57	NA
Sitamarhi	3318	2.25	9171	3.36	34.5
Sheohar	1256	4.23	2058	3.62	36.0
Vaishali	7547	4.63	11816	3.69	NA
Darbhanga					
Darbhanga	5970	3.21	13296	3.48	37.1
Madhubani	11761	4.54	15990	4.23	33.8
Samastipur	8372	4.43	12727	3.86	41.1
Munger					
Begusarai	4820	4.13	9689	4.17	57.0
Munger	3362	3.44	3243	1.93	43.3
Sheikhpura	1024	2.20	1838	2.52	20.9
Lakhisarai	1953	3.62	4186	3.83	30.0
Jamui	3106	3.23	5392	2.78	37.5
Khagaria	3376	4.78	5445	3.56	36.8
Bhagalpur					
Bhagalpur	5033	3.55	8441	3.01	43.0
Banka	3489	2.41	5425	2.11	45.9
Koshi					
Saharsa	3820	4.73	6440	3.76	54.2
Supaul	4557	4.18	8099	3.57	48.1
Madhepura	5037	4.84	7954	4.23	40.0

Purnea					
Purnea	5032	4.02	9164	3.56	32.0
Kishanganj	2616	4.03	7378	4.44	39.0
Araria	4620	3.97	8325	3.59	41.4
Katihar	5186	4.05	11016	4.55	49.0
Bihar	204866	3.81	322327	3.21	35.8

Note : Figures for Arwal have been included in Jehanabad

Source : DISE Report, 2005-06 and 2008-09

Along with the substantial expansion in number of schools, the state government had also decided to recruit at least 1.50 lakh additional teachers in primary and upper primary schools. By the beginning of 2008-09, 1.18 lakh additional teachers were already appointed, bringing their number from 2.05 lakh to 3.22 lakh (Table 2.6). Unfortunately, these additional recruitments were still very inadequate, in view of the substantial increase in the number of schools in the preceding two years. As such, average number of teachers per school had actually decreased from 3.81 in 2005-06 to 3.21 in 2008-09. But the state government's original plan was to recruit 1.50 lakh additional teachers and the officials claim that all the remaining 0.32 lakh teachers have now been recruited. Thus, the present strength of elementary school teachers should be about 3.54 lakhs. But even with these additions, the average number of teachers per school would be approximately 3.58, still lower than the average of 3.81 teachers per school, as it was in 2005-06. Very recently, the state government has decided to appoint 75 thousand more teachers; when these planned recruitments are made, their total strength would be about 4.33 teachers. Assuming that each primary school has at least six teachers and each upper primary school has at least 12 teachers, the total requirement of teachers for elementary schools in Bihar is at least 7.28 lakh teachers; thus the present shortfall is about 2.95 lakh teachers for the entire elementary education system in Bihar, about 40.5 percent of the desired strength. In 2009-10, the estimated number of children in 6-14 years age-group in Bihar was 240.7 lakh. Since the Education Act mandates a teacher-pupil ratio of 1:30, the desired teacher strength in elementary schools should be about 8.0 lakh teachers, indicating the present shortage to be about 46 percent. In case of planning for the expansion of schools, as observed earlier, the authorities had taken into account the relative school deficiencies in different districts and the expansion was larger in districts with relatively lesser number of schools. Unfortunately, this important consideration was largely ignored while recruiting additional teachers for the schools, consequently, the figures for average number of teachers vary widely among the districts even in 2008-09 — from as low

as 1.40 in Patna to 4.55 in Katihar. One cannot be sure whether this wide inter-district disparity was reduced while the additional recruitments were made after 2008-09.

In the process of appointing additional teachers, the state government had also a reserved 50 percent of the appointments for female teachers and, at present, more than one-third of the elementary school teachers are female. Since female teachers are generally free from any secondary occupation, they are expected to enhance the quality of teaching in elementary schools and, secondly, their appointment also leads to empowerment of women which has substantial positive implications for social development in general and educational development in particular.

Enrolment in elementary schools

As expected, the most immediate consequence of expansion of the elementary school system, in terms of both number of schools and number of teachers, was enhanced enrolment of the children in 6-14 years age-group. Taking into account the primary classes first, one notices that the GER (Gross Enrolment Ratio) for the entire state had increased from 92.1 in 2005-06 to 95.9 in 2008-09 (Table 2.7). In contrast to the situation in 2005-06, when there were only 13 districts reporting a GER of more than 95 percent, in 2008-09 such districts had numbered 27 out of a total of 38 districts. Parallel to the improvement in GER across all the districts, there was also an improvement in NER (Net Enrolment Ratio) from 83.0 in 2005-06 to 88.7 in 2008-09.

The expansion of the elementary schooling system, as mentioned earlier, had paid more attention to the establishment of new upper primary schools, since the deficiency here was more acute. This policy had indeed paid huge dividends and the GER for this part of the elementary education has gone up from a poor 30.0 percent in 2005-06 to an extremely high 92.7 percent in 2008-09. This is not surprising, since earlier a large number of students completing their primary education could not enroll themselves in the next higher class, simply because there was no upper primary school within a reasonable distance, say three km. One should note here that the phenomenon of a village not having a middle school was not limited to the economically backward districts alone, most of which are located in north Bihar; many of the relatively

prosperous districts in south Bihar also had to face this serious school deficiency. But, after the expansion of the elementary schooling system, particularly the upper primary schools, this deficiency was considerably reduced across all the districts and hence, the substantial gains in enrolment was an all-state phenomenon.

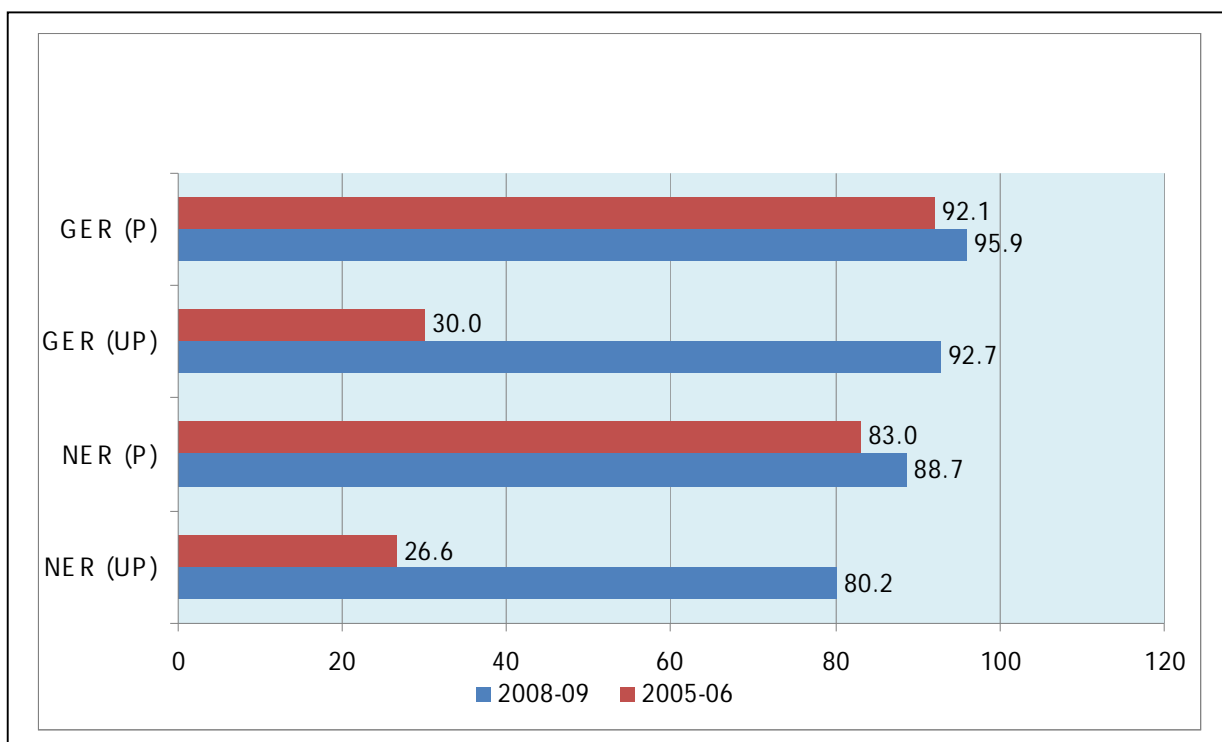
Table 2.7: District-wise Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) for primary and upper primary classes in Bihar (2005-06 and 2008-09)

Division / District	Primary Classes				Upper Primary Classes			
	GER		NER		GER		NER	
	2005-06	2008-09	2005-06	2008-09	2005-06	2008-09	2005-06	2008-09
Patna								
Patna	73.9	93.8	63.0	50.3	28.6	91.8	23.0	50.2
Nalanda	90.7	90.7	77.9	82.5	35.6	89.4	29.5	80.6
Bhojpur	99.2	96.3	97.4	81.4	37.8	91.5	32.9	78.1
Buxar	92.5	97.2	88.0	84.5	46.7	97.7	43.7	97.1
Rohtas	91.3	98.8	81.2	94.0	51.2	97.0	43.1	94.4
Kaimur	118.7	95.8	100.0	95.2	55.6	95.5	51.3	94.9
Magadh								
Gaya	102.0	95.6	100.0	80.7	35.6	94.6	35.4	74.3
Jehanabad	98.6	96.4	83.2	94.1	40.3	92.5	33.3	89.1
Arwal								
Nawada	73.6	94.2	66.0	88.5	23.0	91.7	19.0	85.0
Aurangabad	97.0	92.9	88.0	84.2	38.6	94.2	34.2	79.1
Saran								
Saran	96.5	95.2	89.9	94.1	38.7	94.7	33.7	88.3
Siwan	92.4	95.5	84.9	94.2	30.5	95.4	27.1	51.6
Gopalganj	98.9	95.5	83.6	92.6	36.5	95.9	30.6	92.6
Tirhut								
W. Champaran	91.8	93.7	75.3	92.1	22.1	94.7	16.2	69.8
E. Champaran	87.0	94.3	76.5	94.0	23.0	93.2	19.1	90.0
Muzaffarpur	109.1	97.5	100.0	87.8	32.7	98.8	29.5	75.9
Sitamarhi	80.6	99.0	73.3	96.7	24.1	88.4	20.6	100.1
Sheohar	90.8	98.7	81.9	97.4	20.9	97.5	18.8	92.4
Vaishali	101.8	99.2	98.6	85.5	38.0	97.6	36.1	88.6
Darbhanga								
Darbhanga	82.9	95.8	76.8	83.8	27.4	82.3	25.0	69.0
Madhubani	108.4	98.3	95.3	94.8	33.8	92.5	28.5	89.1
Samastipur	93.2	98.4	86.0	83.0	28.5	93.9	24.3	79.3
Munger								
Begusarai	110.6	93.6	100.0	85.1	24.8	97.0	24.7	66.9
Munger	82.4	93.3	75.7	88.2	42.8	85.1	37.0	80.7
Sheikhpura	88.7	90.5	86.7	92.8	26.6	82.5	24.1	104.4
Lakhisarai	94.3	98.0	83.6	94.7	41.9	93.4	36.8	88.1
Jamui	87.3	98.7	78.9	93.6	24.0	93.9	21.7	89.4
Khagaria	80.1	93.0	78.6	85.6	22.9	93.1	20.6	85.5
Bhagalpur								
Bhagalpur	89.0	98.8	78.5	94.4	23.9	97.1	19.8	86.2
Banka	83.4	97.0	73.1	94.1	18.9	91.7	16.4	84.7
Koshi								

Saharsa	84.7	97.0	73.3	96.1	22.4	86.2	19.3	84.4
Supaul	92.0	97.7	81.4	94.9	23.5	89.4	19.6	89.2
Madhepura	101.2	93.9	90.5	89.2	24.1	85.1	20.1	77.0
Purnea								
Purnea	96.5	91.6	88.9	84.2	18.9	85.4	16.5	78.5
Kishanganj	80.5	98.0	67.4	89.2	15.8	95.6	12.6	95.4
Araria	83.1	96.7	76.8	92.2	25.4	91.9	21.6	87.7
Katihar	84.0	94.5	71.6	92.8	25.3	88.6	19.9	76.6
Bihar	92.1	95.9	83.0	88.7	30.0	92.7	26.6	80.2

Figure 2
Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) in Bihar (2005-06 & 2008-09)

P = PRIMARY UP = UPPER PRIMARY



Incentive schemes

For students enrolled in Standard I-VIII in Bihar, two incentive schemes have been operative for long — no tuition fees and free text books. During 1970s, the state government had introduced an additional incentive scheme in the form of scholarship for the students belonging to scheduled castes and scheduled tribes. At present, a scheduled caste/tribe student in Standards I-V receives a sum of Rs. 180 per annum, and those in Standards VI-VIII receive a sum of Rs. 360 per annum. There is also a provision for extending this scholarship scheme to students from extremely backward castes should there be a surplus after covering all the students from among the scheduled caste and tribes. Unfortunately, with near universal enrolment, scholarship funds

now are so inadequate that even all the eligible scheduled caste and tribe students cannot be paid their due amount. Indeed, in some cases, the authorities often do not distribute the fund at all, fearing partial coverage of eligible students may cause serious disincentive for those who remain deprived, and it may also cause a social discontent disturbing the functioning of the schools.

A fourth component of the incentive scheme for elementary education in Bihar is the Midday Meal Scheme (MDMS) which was introduced in 1995 in the form of 3 kg of dry ration to all the children. This arrangement was continued till 2004, after which cooked meal was introduced in 30 chosen blocks of the state. Since January, 2005, MDMS has been universalised, where all primary and upper primary schools serve cooked meal to their students. In view of severe poverty of the people, particularly in the rural areas, one cannot deny that MDMS has immense potential in enhancing the enrolment in elementary schools. This scheme, as is well known, is financed by the central government, but implemented by the state governments. Unfortunately, as it emerged from the present survey, implementation of MDMS in primary and upper primary schools in Bihar is presently beset with a number of problems, and serving of midday meal in many of the schools is very irregular.

To promote elementary education further, the state government with its own resources has introduced yet another incentive scheme in 2005-06 which provided for free uniform to all the students in Standards III-V and only girl students in Standards VI-VIII. This scheme is implemented through a cash transfer method, Rs. 500 per year for students in the Standards III-V and Rs. 700 per year for girl students in the Standards VI-VIII. This scheme has become extremely popular in Bihar, not merely because the incentive is substantial, but it is also widely implemented.

The elementary education system in Bihar, as is evident from the above accounts, has been strengthened substantially since 2005-06. The immediate gain of this policy intervention is the higher enrolment in elementary classes, particularly the upper primary classes, as reported by the Bihar Education Project (BEP). In the remaining chapters of the study, an attempt is first made to verify the official data on higher enrolment and then analyse other important dimensions of the system, including parental background of the students and functioning of the schools.

CHAPTER III

Child Enrolment in Schools: Progress and Challenges

The substantial strengthening of the elementary education system during the last five years has resulted in the near universalisation of enrolment of children in primary classes in Bihar, as claimed by the official data. The GER for children on primary classes in 2008-09 is reported to be 95.9 percent, compared to a much lower GER (92.1 percent) in 2005-06. In case of children in the upper primary classes, the GER was reported to be only slightly lower (92.7 percent) in 2008-09, after recording a massive increase from its earlier level (30.0 percent) in 2005-06. This major improvement in the enrolment ratios clearly indicate that breaking from the earlier scenario, the demand for education even in the rural areas of Bihar is very high and has remained largely till recently in the face of inadequate unmet schooling facilities. Although the present elementary education system still suffers from many deficiencies, these high enrolment ratios are also confirmed by the present survey of 900 households in 30 villages across five districts.

Enrolment ratios

From the household survey, it emerged that 98.1 percent of the children in 6-14 years age-group were enrolled in schools (Table 3.1). Probably because the survey was conducted in sample villages which had at least one primary or upper primary school (chosen purposively), the observed enrolment ratio is a little higher than the officially claimed ratios (95.9 percent for primary classes and 92.7 percent for upper primary classes.). It could also be because the survey was conducted in 2010, while the reported official data relates to 2008-09. But, in any case, the official figures and the survey estimates together clearly indicate a situation where at least the enrolment of the children in 6-14 years age-group has become nearly universal in rural Bihar. This is true for both boys and girls, save for an extremely small difference between them in terms of enrolment ratios. This obviously implies a qualitative change in the elementary education

scenario in Bihar. The distribution of the enrolled children by grade indicates that about three-fourths of such children are in primary classes and the remaining one-fourth in upper primary classes. From the data on age distribution of overall population (1901 census), it is found that of the total number of children in 6-14 years age-group, about 68 percent are in 6-11 years age-group (primary classes) and the remaining 32 percent are in the age-group 12-14 years (upper primary classes). In other words, in the present enrolment pattern of the children in 6-14 years in Bihar, many students are seen to be enrolled in grades that are below their age-matching ones, because of their late enrolment. This implies a NER (Net Enrolment Ratio) lower than GER, as was reported by the official data presented earlier. However, with the present trend of near universal enrolment of children continuing in future years, it is almost certain that NER and GER will be nearly equal in Bihar within a few more years. One may also note here that this mismatch between the age and the grade of students is much wider in case of girls.

Table 3.1 : Information on school enrolment of children in 6-14 years age-group (Household Survey)

Characteristic	District					Sex		All Children
	Bhoj-pur	Gopal-ganj	Bhagal-pur	Madhu-bani	Kati-har	Boys	Girls	
Percentage Distribution of Children (6-14 Years) by Schooling Status								
Enrolled in School	99.8	98.6	96.6	97.4	97.7	98.6	97.5	98.1
Presently a Dropout	0.2	0.7	0.2	0.6	0.5	0.6	1.0	0.8
Never Enrolled	0.0	0.7	1.4	2.0	1.8	0.8	1.5	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage Distribution of Enrolled Students by Grades								
Primary	69.5	71.4	78.2	74.8	79.8	71.0	78.5	74.6
Upper Primary	30.5	28.6	21.2	25.2	20.2	29.0	21.5	25.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage Distribution by Enrolled Students by Type of School								
Government	92.8	87.3	94.2	97.7	99.5	92.9	95.7	94.1
Private	7.2	12.5	5.1	2.3	0.3	6.9	4.0	5.7
Madarsa	0.0	0.3	0.8	0.0	0.3	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

From the information on the type of schools in which the children are enrolled, it is observed that private schools are not altogether absent even in the rural areas of Bihar. For the state as a whole, private schools account for 5.7 of the total enrolment and in Bhojpur and Gopalganj, two relatively prosperous districts, this share goes up to 7.2 and 12.5 percent, respectively. This again is reflective of the high demand for education in rural areas of Bihar where at least some of the

households are willing to pay for it, in case the government schools are not there or are functioning unsatisfactorily. The gender bias in education is also reflected here, as the share of private schools in boys' enrolment is 6.9 percent, compared to 4.0 percent for girls. Madarsa education, preferred by some of the Muslim households, however, has only very insignificant (0.2 percent) share of the total enrolled students.

With near universal enrolment of all children in 6-14 years age-group, it is obviously not necessary to investigate whether the phenomenon is true for marginalised sections of the society — scheduled castes/tribes and Muslims. But from school-level data, an attempt was made to verify whether the shares of scheduled caste/tribe and Muslims students in the total enrolment of the elementary schools match their share in overall population - a consequence of universal enrolment (Table 3.2). The figures in the table show that the shares of both scheduled caste/tribes as well as Muslims in the total enrolment in primary classes are a little higher than their shares in the overall population. For scheduled caste/tribes, the share in the enrolment in primary classes is found to be 18.7 percent, against a share of 16.6 percent in overall population. Similarly, for Muslims, the share in the enrolment in primary classes is again 18.7 percent, compared to their population share of 16.5 percent. When one moves to the upper primary classes, the shares of these marginalised sections of the population are, however, seen to decrease substantially — 10.0 percent for scheduled castes/tribes and 10.2 for Muslims. Together, these figures indicate that although enrolment of children in 6-14 years age-group is a near universal phenomenon even for the marginalised people, a large number of them are indeed late learners as they are enrolled in classes which are below what their age demands.

Table 3.2: Percentage share of scheduled castes/tribes and Muslims in enrolment (School Survey)

Characteristic	District					Type of School		All School
	Bhoj-pur	Gopal-ganj	Bhagal-pur	Madhu-bani	Kati-har	Primary	Upper Primary	
Share of SC / ST								
Std. I & II	24.8	10.4	7.5	29.7	23.8	14.9	20.5	17.4
Std. III & IV & V	19.0	16.6	10.5	27.9	22.4	17.1	21.6	19.5
All Primary Classes	21.6	13.7	9.2	28.4	22.9	16.1	21.2	18.7
Std. VI	6.8	7.5	4.0	17.5	14.4	—	10.0	10.0
Std. VII & VIII	8.2	7.7	9.0	15.0	14.6	—	10.0	10.0
All Upper Primary Schools	7.7	7.6	6.8	16.1	14.5	—	10.0	10.0
Share of Muslims								
Std. I & II	—	13.8	20.9	11.6	38.4	25.5	8.6	17.4

Std. III & IV & V	—	14.9	26.6	12.6	35.5	27.1	13.3	19.5
All Primary Classes	—	14.4	24.1	12.3	36.6	26.4	11.7	18.7
Std. VI	—	7.6	0.0	25.2	22.0	—	11.5	11.5
Std. VII & VIII	—	14.7	0.0	11.9	5.8	—	9.5	9.5
All Upper Primary Schools	—	12.5	0.0	17.6	12.4	—	10.2	10.2

Attendance pattern

The enrolment of children, however, does not necessarily mean their regular attendance in schools. Based on the attendance on last six days in the sample schools, it was found that average attendance as a percentage of average enrolment is 62.2 percent for primary and 61.6 percent for upper primary classes (Table 3.3). These rates are indeed low. This rate of attendance is nearly the same in different districts (except Bhagalpur) and in different classes. On being asked about the reasons for poor rates of attendance, the headmasters (respondent for the School Questionnaire) had mentioned parental indifference, and poor functioning of the MDMS as the two most important ones (Table 3.4). The first reason viz. parental indifference is not very relevant for upper primary schools, since with such indifference the students could not have possibly reached the upper primary stage. As such, it is probably the poor functioning of the MDMS which is more important for explaining the low attendance of children. Interestingly, that the MDMS is very irregular is admitted by the headmasters themselves, the very functionaries who have the responsibility to manage the scheme.

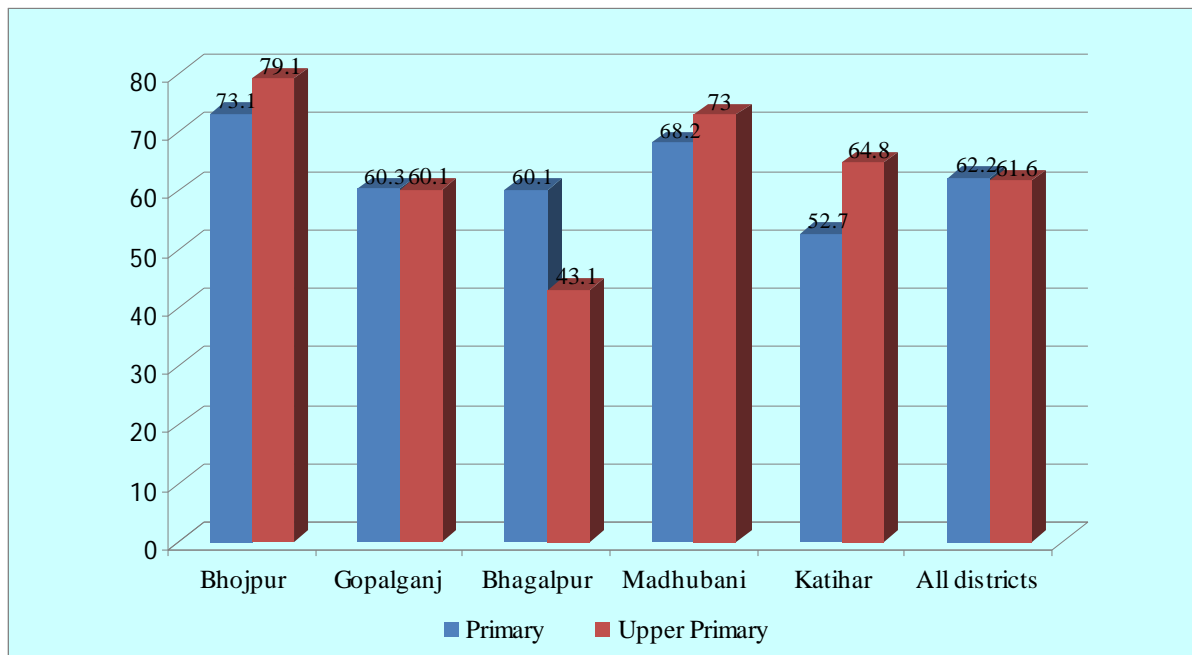
Table 3.3: Average enrolment and attendance in different classes (School Survey)

Characteristic	District					Type of School		All Schools
	Bhoj-pur	Gopal-ganj	Bhagal-pur	Madhu-bani	Kati-har	Primary	Upper Primary	
Std. I + II								
Average Enrolment	38.6	70.5	57.0	38.9	48.2	42.0	63.0	49.8
Average Attendance	27.4	42.3	35.5	28.3	28.0	27.4	36.5	32.6
Rate of Attendance	71.0	60.0	62.3	72.7	58.1	64.3	57.9	65.5
Std. III + IV + V								
Average Enrolment	32.9	54.1	48.3	61.2	57.3	35.2	78.3	50.7
Average Attendance	25.2	32.8	28.2	38.5	28.5	21.9	40.1	30.6
Rate of Attendance	76.6	60.6	58.04	62.9	49.7	62.2	51.2	60.4
All Primary Classes								
Average Enrolment	35.7	60.7	51.7	52.2	53.7	38.2	72.2	50.3
Average Attendance	26.1	36.6	31.1	35.6	28.3	24.1	38.6	31.3
Rate of Attendance	73.1	60.3	60.1	68.2	52.7	63.1	53.5	62.2
Std- VI								
Average Enrolment	36.5	99.0	100.0	71.5	34.7	—	65.1	65.1
Average Attendance	30.7	55.3	44.3	46.0	21.5	—	34.7	38.6
Rate of Attendance	84.1	55.8	44.3	62.9	62.0	—	53.0	59.3

Std. VII + VIII								
Average Enrolment	33.5	110.7	61.0	48.2	25.7	—	55.3	55.3
Average Attendance	25.6	68.7	25.7	36.3	17.1	—	31.5	35.5
Rate of Attendance	76.4	62.1	42.1	75.3	66.5	—	57.0	64.2
All Upper Primary Classes								
Average Enrolment	34.5	106.8	74.0	56.0	28.7	—	58.6	58.6
Average Attendance	27.3	64.2	31.9	40.9	18.6	—	32.5	36.1
Rate of Attendance	79.1	60.1	43.1	73.0	64.8	—	55.5	61.6

Figure 3

Percentage of attendance in primary and upper primary classes



Since the parents play an important role in ensuring child attendance, they were also asked to report how regular is the attendance of their children in schools and, secondly, the reasons for children missing the school whenever they did so (Table 3.5). According to their response, on an average a child attends the school 5.1 days out of six days in a week, implying an attendance rate of 85.0 percent. The gender-wise attendance rates indicate that it is a little higher for the boys (86.7 percent) than for the girls (81.7 percent). In any case, however, these attendance rates reported by the parents are much higher than those obtained from the school-level data. One can mention at least two reasons for such discrepancy between the attendance rates reported by school-level and household-level data. First, to conceal their own indifference about the regularity of attendance of their children, the parents have over-reported the attendance figures for their children. Secondly, it is not unlikely for the school authorities to report higher enrolment figures which may enable them to obtain larger amount of food grains under MDMS.

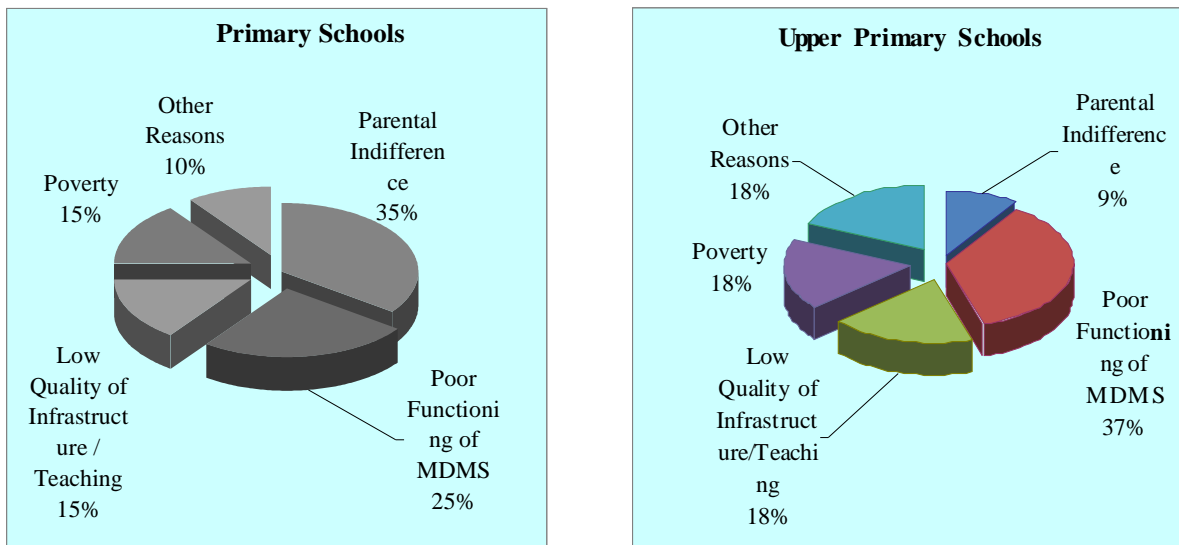
In the absence of any additional information that could help us reconcile the two differing estimates, one can only broadly conclude that the attendance rate of children in the elementary schools is rather low, possibly between 70-80 percent.

Table 3.4 : Percentage distribution of schools by reported reasons for poor attendance (School Survey)

Reasons	Type of School		
	Primary	Upper Primary	All School
Parental Indifference	35.0	9.1	25.8
Poor Functioning of MDMS	25.0	36.2	29.0
Low Quality of Infrastructure/ Teaching	15.0	18.2	17.9
Poverty	15.0	18.2	14.4
Other Reasons	10.0	18.2	12.9
Total	100.0	100.0	100.0

Figure 4

Reported Reasons for Poor Attendance



As regards reasons for child missing the school, the parents had reported several of them, the most important being illness. No less than 88.3 percent of the parents had reported illness as one of the reasons for absence of children from schools. This is rather alarming and it only reiterates that in the absence of complementary nutrition and health inputs, any resource support for the elementary education will only result in limited gains. Nearly one-third of the parents have also

mentioned a lack of interest of the child as a reason for irregular school attendance. One would suspect that such lack of interest is the result of low quality of infrastructure in schools or even the poor functioning of MDMS, both of which were also reported by the school authorities as reasons for poor attendance of students. The third important reason for children missing the schools is child labour, mostly for domestic work and sometimes for economic activities. The domestic responsibilities are more relevant for girl students, more than one-third of the parents citing it as a reason for their daughters missing the schools. In case of boys, the extent of domestic or economic work acting as a deterrent for their attendance in schools is much less, but not altogether absent.

Table 3.5 : Reasons for children missing the school (Household Survey)

Characteristic	District					Sex		All Children
	Bhoj-pur	Gopal-ganj	Bhagal-pur	Madhu-bani	Kati-har	Boys	Girls	
Average Attendance Last Week (days)	4.9	5.4	5.1	5.1	5.1	5.2	4.9	5.1
Attendance Rate	81.7	90.0	85.0	85.0	85.0	86.7	81.7	85.0
Percentage of Parents Reporting Different Reasons for Child Missing the School (Multiple Response)								
Looking after Sibling	0.0	1.3	4.7	4.6	1.3	0.5	3.0	1.7
Domestic Work	27.8	15.3	20.5	21.2	27.3	10.7	34.7	22.5
Farm Work	4.9	1.0	2.0	3.5	2.3	5.3	0.0	2.7
Wage Labour	0.3	0.0	1.3	0.0	0.0	0.6	0.0	0.3
Other Economic Work	1.0	0.0	0.7	1.8	0.3	0.7	0.7	0.7
Child Not Interested	30.4	34.3	36.9	25.5	32.30	34.8	29.2	32.1
Illness	84.5	97.0	81.5	84.5	93.8	91.4	85.9	88.3

The long absence of a student from the schools should evoke some corrective response from both parents and teachers. Because of poor educational background and preoccupation with livelihood-related activities, many parents may not be able to initiate such corrective action, but the teachers should consider such action as one of their professional responsibilities, aware as they are of the parental limitations. But, unfortunately, the teachers of elementary schools in Bihar do not seem to accept that responsibility (Table 3.6). In the event of a student not attending the school for long, the teachers do make some enquiries about the student from either other

students or parents, but they rarely undertake any effort to motivate the student (either directly or through his/her parents) to resume; in case of teachers from upper primary schools, such motivational effort is indeed completely absent. The extreme step of striking off the name of the student from the school is resorted to by only a few primary schools, but not by any upper primary school. That the teachers from upper primary schools neither make any motivational effort, nor take the extreme step of striking off names of very irregular students, should not lead one to conclude that the attendance of students in upper primary schools is relatively higher; it was earlier noted (Table 3.2) that the attendance rates in both types of schools were equally low.

Table 3.6 : Response of Teachers to Long Absence of Students (School Survey)

Response of Teachers	Percentage of Schools		
	Primary	Upper Primary	All Schools
Percentage of Teachers who			
Make Enquiry from Other Students	60.0	45.5	54.8
Make Enquiry from Parents	95.0	100.0	96.8
Motivate Students/Parents to Resume	5.0	0.0	3.2
Strike off Name from School	5.0	0.0	3.2

Learning Achievements

The irregular attendance of the students is almost certain to be reflected in their poor learning achievements. Because of time limitations, the present survey could not conduct tests for learning achievements of the students. But in a recent study conducted by ADRI, such tests were undertaken for students of Standards I and II. The results of these tests are presented in Table 3.7, for both boy and girl students. The figures indicate that about one-fifth of the students are not able to obtain the pass mark of 30 out of 100, in either of the classes. And this rate of failure is nearly same for language and mathematics tests. A score between 30 and 60 probably indicates only moderate level of learning and even that level is achieved by about half of the students in Standard I and by less than half of the students in Standard II, for both language and mathematics tests. That leaves barely 30-40 percent of the students who are seen to achieve decent learning standards in Standards I and II. Fortunately, there is no significant difference between the boys and girls in terms of their learning achievements.

Table 3.7 : Learning Achievements of Students in Standard I and II

	Language				Mathematics			
	Percentage of Students obtaining Marks out of 100				Percentage of Students obtaining Marks out of 100			
	< 30	30-60	> 60	Total	< 30	30-60	> 60	Total
Standard I								
Boys	18.6	44.6	31.8	100.0	16.0	46.8	37.2	100.0
Girls	20.7	51.2	28.0	100.0	19.2	46.5	34.3	100.0
All Students	18.9	50.0	31.1	100.0	17.7	46.8	35.0	100.0
Standard II								
Boys	15.9	42.0	42.1	100.0	20.7	41.2	38.1	100.0
Girls	20.1	42.7	37.1	100.0	21.5	38.6	40.0	100.0
All Students	17.6	42.1	40.3	100.0	20.6	39.8	39.5	100.0

Table 3.8 : Average Number of Students Passing the Highest Class and Getting Enrolled in Next Class (School Survey).

Characteristics	Type of School		
	Primary	Upper Primary	All School
Average number of Students Passing Highest Class	23.6	42.4	30.3
Average number of Students Getting Enrolled in Next Class	22.0	42.2	29.3
Students Enrolled as Percentage of Students Passing out	93.2	99.5	96.7

A second indicator of learning achievements of the students of the elementary schools in Bihar is presented in Table 3.8 which shows the average number of students passing out the highest class in both primary and upper primary schools. In the primary schools, the average enrolment in Standard V is about 50 students, out of which 23.6 students pass out each year. Although nearly all of them get admitted to the next higher class, the pass out rate is barely 47.5 percent which is very low. Although the success rate is low, it is heartening to note that nearly all the successful students (93.2 percent) get admitted in the next higher class (Standard VI). The quality of

students in upper primary schools is expectedly better (since all of them have successfully completed their primary education) and the pass out rate is much higher in these schools. Out of an average enrolment strength of 55 in Standard VIII, 44.2 students are reported to pass their final examinations, implying a pass-out rate of 80.0 percent. Besides better quality of students, this higher pass out rate can also be attributed to the better condition of upper primary schools, both in terms of physical infrastructure and teacher strength, as reported later in Chapter V. Here again, out of the students passing the highest class nearly all (99.5 percent) get admitted in the secondary school, reiterating that the demand for education in rural Bihar is very high.

CHAPTER IV

Parental Background: Social Segmentation in Education

The level of education that a child is able to finally achieve depends both on the educational infrastructure that is available to him/her and the social background that the child comes from. In the absence of a common schooling system, as it exists in many countries, the educational infrastructure available to a child is not uniform in Bihar or even in India as a whole. The state-funded schooling infrastructure, the major provider of elementary education in Bihar, displays considerable variation and the presence of private schools, missionary schools and Madarsas make the system even more heterogeneous. But what makes the educational opportunities for children in Bihar even more unequal is their widely different socio-economic backgrounds. Apart from the varying economic conditions, society is also sharply divided along religion and caste considerations in Bihar, as elsewhere in India. In such a situation, many children are born to parents who are seriously disadvantaged, both economically and socially. On the one hand, their poverty implies inadequate financial resources to support children's education, which one needs even when the education is free; on the other, the social disadvantage in the form of parental illiteracy means that the young children are wholly dependent on learning inputs from the schools alone, supplementary learning inputs being almost absent at home, either from parents or other family members. The poor housing conditions of many of the families also mean that their children do not have required space or lighting facilities to study properly at home. In addition, children from poor families are often required to undertake household work, disturbing their learning activities. All these obviously lead to considerable social segmentation of education where, even in the face of same educational infrastructure, children from different households are able to obtain varying educational opportunities. This chapter presents some relevant information on the extent of such social segmentation in education in Bihar, which has obvious implications for planning a satisfactory elementary education system in the state.

Social profile of children

Although economic status of the households are very relevant for determining the educational opportunities available for the children, the present survey has collected information only on their social characteristics — gender, religion and caste, and parental educational status. (Table 4.1), as collected from the Household Survey.

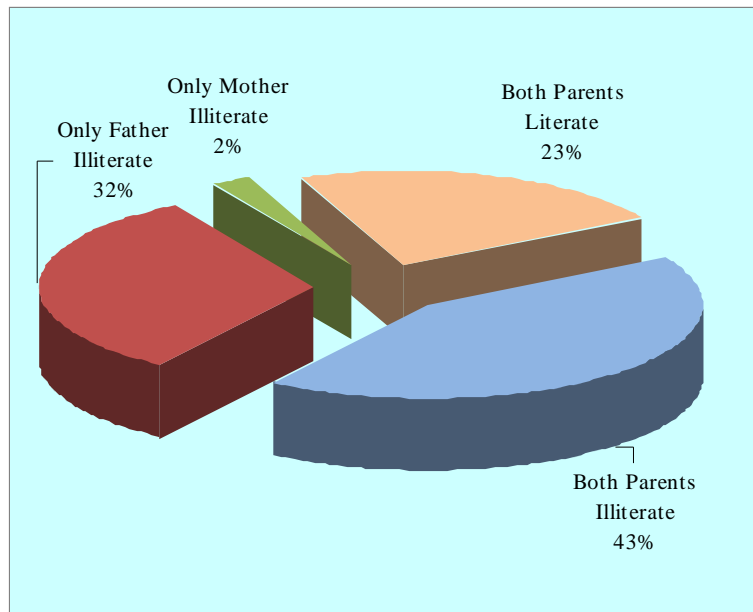
Table 4.1: Profile of children (6-14 years), Household Survey

Characteristic	District					Sex		All Children
	Bhojpur	Gopalganj	Bhagalpur	Madhubani	Katihar	Boys	Girls	
Percentage Distribution by Sex								
Male	57.7	47.4	55.5	54.0	49.9	–	–	52.8
Female	42.3	52.6	44.5	46.0	50.1	–	–	47.2
Total	100.0	100.0	100.0	100.0	100.0	–	–	100.0
Percentage Distribution by Religion and Caste								
Upper Caste Hindus	0.5	10.6	2.8	14.3	3.3	6.4	5.9	6.2
Backward Caste Hindus	74.3	65.0	58.9	43.1	54.9	60.6	59.5	59.8
Scheduled Castes/ Tribes	25.2	10.1	11.2	35.4	19.5	17.7	20.5	20.0
Muslims	0.0	14.3	27.1	7.2	22.3	15.3	15.1	14.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage Distribution by Parental Education Status								
Both Parents Illiterate	21.9	38.0	54.7	44.3	58.1	43.9	41.9	42.9
Only Father Literate	43.7	41.6	24.1	20.8	26.8	30.9	33.4	32.1
Only Mother Illiterate	0.7	1.4	2.2	4.6	2.3	1.9	2.4	2.2
Both Parents Literate	33.7	19.0	19.0	30.3	12.8	23.3	22.3	22.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The gender distribution indicates that the female-male ratio is not only adverse, but more adverse than what the latest census figures indicate. Even after allowing the limitations of a small sample (just 900 households), this ratio does underline the adverse sex ratio in Bihar's population. As the sample size gets smaller in the districts (just 180 households), one finds considerable variation in sex ratio across the districts, the share of male children ranging from 57.0 percent in Bhojpur to 47.4 percent in Gopalganj. As regards the distribution by religion and caste, it is clearly observed that nearly one-third of the children are from either scheduled caste/tribes or are Muslims, the two most disadvantaged communities. The large category of backward caste Hindus, which accounts for 59.8 percent of the children in 6-14 years age-group, is an extremely heterogeneous category since it includes a few castes at the higher end whose members have reasonable measures of land and other resources and, at the lower end, has a number of extremely backward

caste Hindus whose economic and social conditions are practically no different from that of the scheduled castes. One may also note here that many of the backward caste Hindu households, which are economically not very deprived, are at least socially highly-disadvantaged, mainly because of their low educational achievement. The demand for education in Bihar among such backward caste households, which are economically less deprived but educationally very disadvantaged, has increased rapidly in recent decades. It seems the parents in such households have now realised that only with adequate education their children can escape this status imbalance and enjoy a better quality of life.

Figure 5
Parental education status of students



For perpetuating the social segmentation of education, an age-old phenomenon in both Bihar and India, what probably matters most is the parental education status of school-going children. In the third part of Table 4.1, it is observed that for 42.9 percent of children in 6-14 years age-group, both of their parents are illiterate. These parents, even if they are able to provide financial support for their children which is an unlikely event, are not able to help their children otherwise. There are about 34.3 percent of children whose at least one parent (generally father) is literate. Assuming that about half of them are not able to help their children in studies (after all many of them are only very moderately literate), the proportion of effective first-generation learners in

Bihar will be around 60 percent of the total number of school-going children. This is one of the most difficult challenges for the present elementary schooling system in Bihar. It is important for the educational planners to realise that this challenge can be met only through establishment of schools that can compensate for the parental deficiencies of first generation learners. Parallely, the teachers in elementary schools should also be equally mindful of the additional requirements of first-generation learners. It is also to be noted that parental literacy status shows considerable variation across the five districts. One the one end lies Bhojpur where at least one-third of the children have parents, both of whom being literate, Katihar lies on the other end where only 12.8 percent children are fortunate to have such parents.

Attitudinal profile of parents

The economic and social disparities among the households or parents, besides implying varying endowments, sometimes may also imply attitudinal differences. The survey had tried to find out the extent of such attitudinal differences between the illiterate and literate parents — first through the reasons they mention for the importance of education, and then through the level of education they desire for their children. As regards the reasons mentioned for importance of education (Table 4.2), it is found that for boys both illiterate and literate parents mention employment prospects, gain in social status, and acquiring of confidence as the three most important reasons for being educated. The literate parents are, however, a little more appreciative about the gains in social status, probably, because they already enjoy this status advantage and would like it to be enhanced for their sons and daughters. Such reasons as acquiring of skill or ability to teach children or better marriage prospects are mentioned by only a small percentage of parents; but even here, the literate parents are more aware of these advantages of education than their illiterate counterparts.

In case of girls, it is the ‘better marriage prospects’ which is underlined as the most important reason for acquiring education, by both illiterate and literate parents. The three reasons that were most important for boys' education (viz. higher employment prospects, gain in social status, and acquiring of confidence) are also mentioned for girls but not as strongly as was made for the boys. It is also interesting to note that ability to teach children appears as a very strong reason for girls' education, again by both illiterate and literate parents. In a typical scenario, it is generally believed that mothers are much better placed to provide initial learning inputs at home to their young children, fathers being preoccupied with their livelihood-related responsibilities. Many of

the reasons mentioned by parents for importance of education are indeed overlapping in nature, but one can easily infer that both illiterate and literate parents are now widely conscious of both economic as well as social advantages of education. It is, therefore, not surprising that all of them are eager to send their children to schools, although the present quality of teaching in the schools leaves much to be desired.

Table 4.2 : Reasons mentioned for importance of education (Household Survey)

Reasons	District					Respondent's Educational Status		All Respondents
	Bhoj-pur	Gopal-ganj	Bhagal-pur	Madhu-bani	Kati-har	Illiterate	Literate	
Percentage of Respondents Mentioning Different Reasons								
For Boys								
Employment	96.7	99.4	92.9	92.9	98.9	96.0	96.4	96.1
Social Status	39.9	32.0	54.4	50.8	24.6	36.8	46.6	40.4
Confidence/Independence	65.0	65.2	41.8	32.8	67.0	56.2	51.0	54.3
Write letters/keep accounts	3.3	4.4	3.3	7.7	1.7	3.8	4.5	4.1
Teaching Children	1.6	1.1	5.5	2.7	1.1	1.4	4.2	2.4
Marriage prospect	2.2	1.1	6.0	1.1	0.0	0.9	4.2	2.1
For Girls								
Employment	53.6	43.6	42.3	54.1	62.6	49.4	54.3	51.2
Social Status	36.1	28.7	17.0	19.7	13.4	17.6	32.2	23.0
Confidence/Independence	41.0	43.1	35.7	23.5	57.0	42.6	35.5	40.0
Write letters / Keep accounts	8.2	6.1	6.6	10.9	2.2	6.6	7.2	6.8
Teaching Children	12.0	26.0	33.0	27.9	19.0	23.0	24.5	23.6
Marriage prospect	65.6	66.9	72.0	53.0	42.5	55.8	67.2	60.0

In case of the level of education that parents desire for their children, both boys and girls, one observes much wider difference between illiterate and literate parents (Table 4.3). To begin with, it is first observed that elementary education (i.e. passing Standard VIII) is considered to be insufficient by both illiterate and literate parents, be it for boys or girls. Moving to the next stages, 61.8 percent of the illiterate parents say they will be satisfied with their sons completing either Standard X or Standard XII. But in case of literate parents, this percentage is much lower at 34.0 percent. Obviously, literate parents have much higher expectations about their sons' education, as no less than 65.7 percent of them would like their sons to complete at least graduation. In case of girls, the desired level of education is not only much lower, but this gender discrimination is displayed even by literate parents to a considerable extent. Consider, for

example, the fact that while 36.9 percent of illiterate parents would like their sons to be at least a graduate, for the daughters the corresponding figure is much lower at 15.2 percent. Similarly, while 63.7 percent of the literate parents would like their sons to be at least a graduate, for the daughters the corresponding figure is again much lower at 38.5 percent. Thus, although not as strong a deterrent as economic and social inequality, the parental perceptions about the importance of education are also seen to be a contributor to the social segmentation in elementary education in Bihar. As yet another indicator of parental attitude towards education, they were also asked to express their opinion on elementary education being made compulsory. The idea was largely approved by all parents (86.0 percent), but the literate parents had approved it more (89.9 percent), compared to the illiterate ones (83.8 percent). However, some parents (14.0 percent) disapprove any element of compulsion, even when it is planned to be invoked for a cause, as noble as elementary education.

Table 4.3 : Percentage distribution of parents by desired level of children's education (Household Survey)

Level of Education	District					Respondent's Educational Status		All Respondents
	Bhoj-pur	Gopal-ganj	Bhagal-pur	Madhu-bani	Kati-har	Illiterate	Literate	
Desired Level for Boys								
Primary	0.5	0.0	0.0	0.5	0.6	0.3	0.3	0.3
Class VIII	0.0	0.0	0.5	1.1	1.7	0.9	0.0	0.6
Class X	11.5	21.5	30.2	18.6	39.7	31.6	11.3	24.1
Class XII	23.5	29.8	20.9	25.7	37.4	30.2	22.7	27.4
Graduation	45.4	34.8	16.5	37.7	17.9	22.5	44.2	30.5
Post-graduation	19.1	13.8	31.9	15.8	3.9	14.4	21.5	17.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Desired Level for Girls								
Primary	0.0	0.6	0.5	2.2	0.6	1.2	0.0	0.8
Class VIII	4.9	2.8	8.2	6.6	5.0	7.7	1.8	5.5
Class X	39.3	44.8	54.4	44.8	69.3	58.1	37.3	50.4
Class XII	30.1	22.7	12.6	17.5	14.5	17.8	22.4	19.5
Graduation	15.8	21.0	8.8	19.1	9.5	8.4	26.0	14.9
Post-graduation	9.8	8.3	15.3	9.8	1.1	6.8	12.5	8.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage of Parents Approving Compulsory Education	92.9	98.3	81.3	59.0	98.9	83.8	89.9	86.0

Learning inputs at home

One of the principal factors, perpetuating the social segmentation of education, is the availability of learning inputs at home for young children from either their parents or other senior members of the household. The survey had specifically enquired about the extent of such teaching help for the sample children (Table 4.4). It was found that 61.1 percent of the children did not receive any such help, and the remaining 38.9 percent were fortunate to receive such help, either from father (16.1 percent) or from mother (5.1 percent) or from other members of the household (17.7 percent). In view of very modest educational background of most family members, the quality of such teaching help may not be very satisfactory but even limited assistance can help the young children in their learning efforts, ensuring their continued interest in school education. Of the children that received no such teaching help from household members, 30.1 percent had a private tutor and another 4.3 percent did not require such help, possibly because of their higher intelligence level (Table 4.5). These two categories together accounted for about one-third of the children, leaving the remaining two-thirds without any teaching help at home. Taking into account the figures in Tables 4.4 and 4.5 together, it emerges that nearly 40 percent of all the school-going children are in need of some teaching help at home, but are not able to receive it. Such deficiencies in learning inputs for children from the disadvantaged social groups are most likely to widen the social segmentation of education. Unfortunately, the present elementary education system in Bihar does not allow for learning inputs at schools which are adequate enough to compensate for the absence of similar inputs at home.

Table 4.4 : Information of teaching help received by children at home (Household Survey)

Nature of Help	District					Sex		All Children
	Bhoj-pur	Gopal-ganj	Bhagal-pur	Madhu-bani	Kati-har	Boys	Girls	
Percentage Distribution of Students by Nature of Help at Home								
No Help	46.9	59.8	70.1	59.4	69.5	57.8	65.4	61.1
Help by Father	24.9	11.3	6.4	24.7	13.3	17.5	14.2	16.1
Help by Mother	5.8	4.0	7.7	6.0	2.3	5.2	4.9	5.1
Help by Others	22.3	24.9	15.8	9.9	14.9	19.5	15.5	17.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In case of the desired level of education for their children, discussed earlier, the parents had shown considerable gender discrimination in favour of their sons. Those responses were indeed related to their attitudes, not actual behaviour. The responses tabulated in Tables 4.4 and 4.5,

however, relate to their actual behaviour regarding teaching help to their sons and daughters. Here, one clearly observes a much wider gender discrimination, both for teaching help provided

Figure 6
Nature of help received by students at home

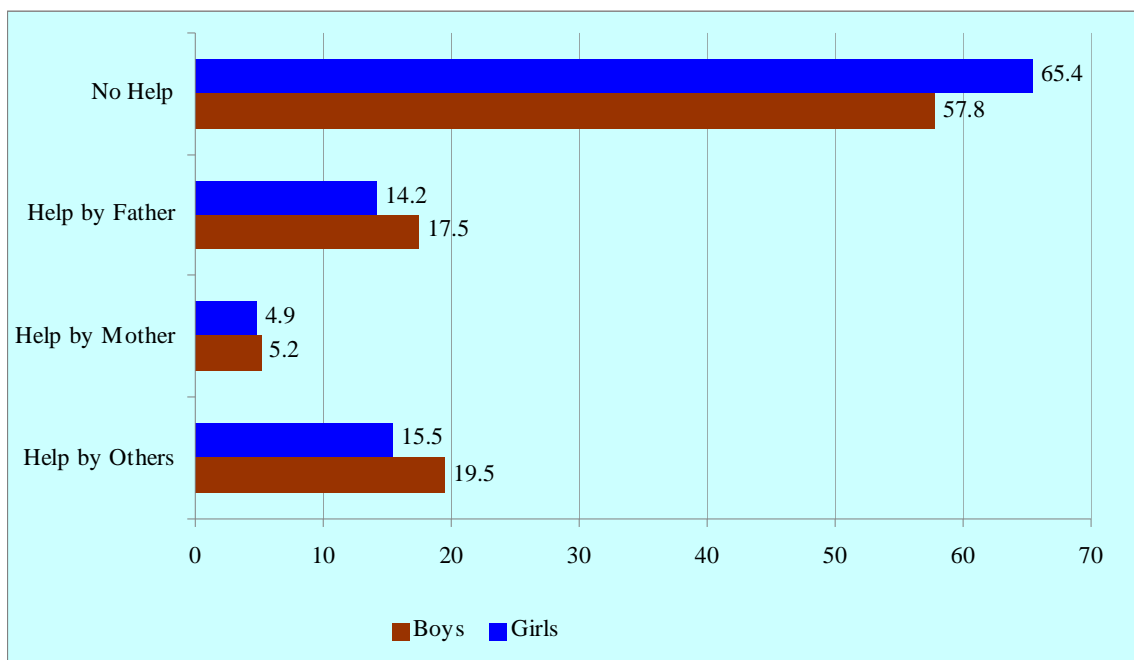


Table 4.5 : Reasons for children not receiving any teaching help at home (Household Survey)

Reasons for No Help	District					Sex		All Children
	Bhoj-pur	Gopal-ganj	Bhaga-lpur	Madhubani	Kati-har	Boys	Girls	
Percentage Distribution of Students by Reasons.								
None in home sufficiently educated	57.0	54.3	59.3	72.9	64.0	47.1	76.4	61.5
Educated members are busy	17.6	4.3	1.4	1.2	0.0	1.9	6.3	4.2
Has a private tutor	18.3	34.2	38.8	25.3	29.4	45.6	14.3	30.1
Child does not require help	7.0	7.1	0.5	0.6	0.6	5.4	3.0	4.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

by household members and engaging the services of a private tutor for such help. While 57.8 of the boy students did not receive any teaching help at home from any member, the corresponding figure for girls was higher at 65.4 percent. In the next step, about half (45.6 percent) of the boy students, unaided by any family members, had the privilege of a private tutor;

in contrast, only 14.3 percent of the similarly placed girl students had a private tutor. Again, combining the figures of Table 4.4 and 4.5, it emerges that almost one out of every four boy students in elementary classes has a private tutor; but for the girl students it was available for only one out of 10. This gender discrimination is indeed very wide.

Private expenditure on education

The elementary education in Bihar is free as is in other Indian states. Under this arrangement, the school-going children are not required to pay any tuition fee and, in addition, they are also provided free textbooks. As mentioned earlier, in Bihar, the state government also provides a few other incentives in the form of midday meal, school uniform (for all students in Classes I-V and girl students in Classes VI-VIII) and stipends for scheduled caste/tribe students. However, parents are still required to incur considerable private expenditure on their children's education, not only for private tuition which might be optional, but for essential items like clothes, notebook/pencil, transport etc. In a state like Bihar, where nearly half of the population lives below poverty line implying that many households are not able to meet even their food requirements, it is certainly not easy for all parents to take care of the educational expenditure of their children. This obviously implies another source of social segmentation of education — poor parents are not able to meet all the required expenditure for their children's education, allowing the children of richer parents to consolidate their already advantageous educational status. To obtain an idea about how large is the private expenditure on education the survey has collected data on the level of annual private expenditure per child. This level of expenditure, however, does not indicate the 'required' level of expenditure, since many households in the sample are poor, spending less than the required amount.

The average expenditure per school-going children per year is estimated to be Rs 1,330. Three major heads of this total private expenditure are — uniforms/clothes, notebook/pencil and private tuition. Of these, the expenditure on private tuition (Rs 499) is the highest, accounting for 38.3 percent of the total private expenditure. But even if one excludes the expenditure on private tuition, the annual private expenditure on a child's education is Rs 831, a substantial amount for a poor household. When one considers the private expenditure level separately for boys and girls, it emerges that the annual expenditure on boy students (Rs 1,456) is 23.1 percent higher than the same for girl students (Rs 1,183). The parents pay substantially more for boys on account of textbooks (Rs 80 for boys and Rs 45 for girls), uniforms/clothes (Rs 343 for boys and 265 for

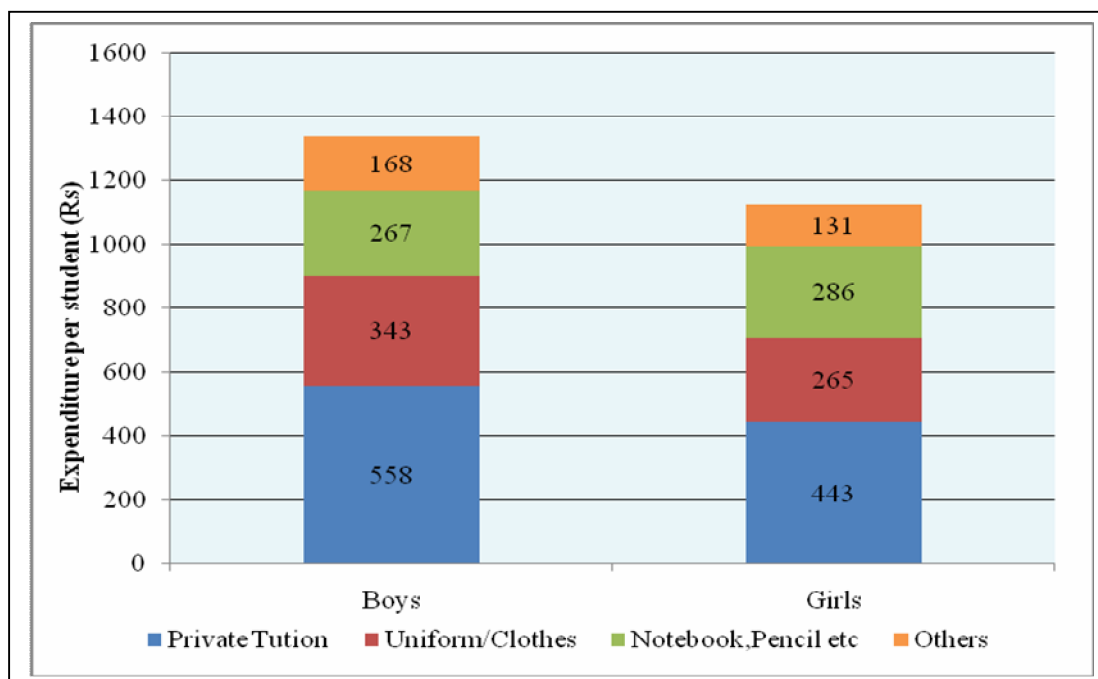
girls) and private tuition (Rs 558 for boys and Rs 443 for girls). The gender difference is highest for expenditure on private tuition, which is 26 percent higher for boys. Across the districts, the average expenditure is lowest in Bhojpur (Rs 1,133) which is surprising since it is a prosperous district, and is highest in Gopalganj (Rs 1,571), the second most prosperous among the five districts.

Table 4.6 : Average annual private expenditure (in Rs) on education per student (Household Survey)

Expenditure Heads	District					Sex		All Children
	Bhoj-pur	Gopal-ganj	Bhag-alpur	Madh-ubani	Kati-har	Boys	Girls	
Fees (other than tuition)	9	35	11	0	0	9	14	11
Textbooks	50	90	57	24	24	80	45	62
Uniforms / Clothes	358	325	275	275	275	343	265	306
Notebook, Pencil etc.	207	404	284	321	321	267	286	276
Transport	44	98	26	5	5	36	40	39
Private Tuition	317	345	607	494	494	558	443	499
Other Items	61	31	48	34	15	43	32	38
Total Expenditure	1133	1571	1344	1488	1143	1456	1183	1330

Figure 7

Average annual private expenditure (in Rs) on education per student



To obtain an idea about how large is the private expenditure on education for the parents, one may compare this expenditure estimates with the average monthly consumer expenditure of households which are just above the officially defined poverty line. According to the latest estimates of the Planning Commission, the poverty line in Bihar is set at the consumer expenditure of Rs 433 per person per month in 2004-05 prices. Taking into account the price rise between 2004-05 and 2009-10 and assuming the average size of a household to be 5.5, the monthly consumer expenditure should be about Rs 3,600 for a household in rural Bihar to be just above the poverty line. An annual private expenditure on education of Rs 1,330 per child implies a monthly expenditure of about Rs 110. Further, assuming two school-going children per household, it implies a monthly expenditure of Rs 220 per household. Thus, even for a household that is just above the poverty line, the present level of private expenditure on education means at least six percent of its total expenditure. For more than half of the households, which live below the poverty line, even the present average level of private expenditure on education would mean a substantial share of the total expenditure.

CHAPTER V

Functioning of Schools: Infrastructure and Incentive Schemes

The environment at their home on the one hand and the schooling environment on the other jointly constitute the educational opportunities for a child. For many children in Bihar, their home environment has serious deficiencies, in terms of both economic conditions and, as discussed in the previous chapter, the educational endowment of the adult members of the family. A number of developing countries of the world, who have succeeded in the recent decades in radically improving their educational standards, have done so by planning a school education system that largely compensates for the serious economic and social deficiencies which young children, especially first-generation learners, face at home. Making elementary education free, through abolition of tuition fees, providing textbooks to children and midday meal, is only a part of that desired schooling system. All these incentives may result in bringing the children to schools, but the final learning outcomes of the children depend on how satisfactory is the functioning of these schools in terms of their infrastructure, teaching personnel and pedagogy.

The elementary education system in Bihar, as described in Chapter II, has experienced major expansion since 2005-06, in terms of the number of schools and teachers both. This expansion has also resulted in huge improvements in the enrolment, both in the primary and upper primary schools, more substantively in the latter. Unfortunately, however, the attendance of children in schools was found to be rather low like their learning achievements. In the previous chapter, some dimensions of the social segmentation of education process in Bihar were analysed which is a major contributor to the low attendance and learning achievements of the school-going children. In this chapter, the analysis is focussed on the functioning of the schools, another important factor determining the educational progress of the children.

Pre-school education

Pre-school education is a critical component of any effective education policy, as the first six years of life of a child are crucial for his/her lifelong development. By inculcating some desired habits and values in the child, the pre-school education significantly contributes to retention of children in schools and raises their educational achievements.

In Bihar, the only programme through which the task of pre-school education is mainly addressed is the Integrated Child Development Scheme (ICDS) which also has a health and nutrition component. The pre-school education, along with the health and nutritional supports, under the scheme, is provided at the Anganwadi Centres (AWCs) which are expected to be managed by two persons — an Anganwadi Worker and an Anganwadi Helper. At the block level, there is a post of Lady Supervisor to monitor the functioning of the AWCs. Although majority of the AWCs have both the Anganwadi Worker and Anganwadi Helper, the posts of Lady Supervisors for the AWCs are largely vacant. According to the latest official data, relating to the year 2008-09, for the targeted child population about 86 lakh in 3-6 years age-group, there were 91.6 thousand AWCs in Bihar. Since each AWC is meant to serve only 40 children (excess inclusion is not allowed), the total capacity of the existing AWCs is about 36.6 lakh, implying the coverage of only 42.6 percent. This coverage is far from satisfactory; secondly, as was found through the survey, even the existing AWCs are not able to provide all the mandated child development services.

Table 5.1: Information on functioning of Anganwadi Centres (AWCs), Household Survey

Characteristic	District					All Districts
	Bhoj-pur	Gopal-ganj	Bhagal-pur	Madhu-bani	Kati-har	
Percentage of Children (3-6 yrs) attending AWC	43.2	25.9	66.0	21.9	64.9	48.7
Reasons for Children (3-6 yrs) Not attending AWC						
AWC Capacity Exhausted	14.3	31.2	32.4	9.4	4.0	18.5
AWC Too Far	25.6	37.5	29.7	24.5	68.0	32.1
Irregular functioning of AWC	43.8	3.1	10.0	49.0	0.0	24.0
Pre-school education not given	0.0	3.1	5.4	15.1	16.0	8.9
Child not able to go alone	0.0	15.1	2.7	1.9	12.0	7.7
Others	16.3	9.9	19.7	0.0	0.0	8.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

As per the present survey, it is found that the coverage of AWC is 48.7 percent of the total number of children in 3-6 years age-group, which is fairly close to the official estimate (Table 5.1). In response to the enquiry about why some children were not attending AWCs, it was found

that in about half of the cases it was because of the non-availability of an AWC in the neighbourhood (18.5 percent reporting that the nearest AWC's capacity has already been exhausted and another 32.1 percent not having any AWC nearby). Another important reason, mentioned by about one-fourth of the respondents, was irregular functioning of the AWCs. It is generally observed that the nutrition-related activities keep the AWC functionaries more busy and, consequently, they are able to pay only limited attention to the pre-school education of the attending children. Indeed, 8.9 percent of the respondents have mentioned the absence of pre-school education as the reason for their children not attending the AWCs. These figures lead one to conclude that the opportunities for any meaningful pre-school education are indeed very limited for rural children in Bihar. Among the districts, one observes considerable variation regarding the coverage of AWCs, ranging from only 21.9 percent in Madhubani to 64.9 percent in Katihar. Thus, even under best conditions, AWCs are able to cover about two-thirds of the children. In the two districts where the coverage is relatively low (Madhubani and Gopalganj), it is mainly because of the non-availability of an AWC in the neighbourhood.

In Bihar, apart from ICDS, there is a programme of 'Early Childhood Care and Education' under SSA, dealing with pre-school education. Presently, there are 5,100 centers known as 'Bal Varg' to run this programme within the elementary school premises for children in 3-6 years age-group.

School availability and infrastructure

Because of a substantial increase in the number of primary and upper primary schools in Bihar since 2005-06, the children in 6-14 years age-group are now fortunate to have a school within a reasonable distance from their residence. For the sample school-going children in the present study, the average distance of their schools was only 0.4 km and the average time to reach the schools was only 10 minutes (Table 5.2). This extremely comfortable situation regarding the availability of schools in the sample villages is because only those villages were chosen which had a school in it. But there are now no less than 79.8 thousand primary schools and 27.2 thousand upper primary schools for about 45 thousand villages and 130 towns; consequently, Bihar now has about three primary schools and one upper primary school for every two villages.

This is almost certain to ensure that there is now at least one primary school within a kilometre's distance for all children and an upper primary school within three kilometres.

Table 5.2 : Information on accessibility of schools and admission formalities for school-going children (School Survey)

Admission Formalities	District					Sex		All Children
	Bhoj - pur	Gopal - ganj	Bhagal- pur	Madhu- bani	Kati- har	Boys	Girls	
Average Distance of School (in km.)	0.4	0.6	0.2	0.6	0.4	0.5	0.4	0.4
Average Time Taken to Reach School (minutes)	9	13	8	11	10	10	10	10
Percentage of Students Meeting Selected Formalities								
Birth Certificate	0.5	2.1	6.4	15.2	0.0	4.6	4.5	4.5
Transfer Certificate	9.1	12.2	10.4	9.0	7.5	10.2	9.1	9.7
Admission Test	4.0	5.5	2.9	2.0	0.3	4.1	1.6	3.0
Parent's Interview	1.0	0.8	2.7	7.3	0.0	2.1	2.4	2.2

In a typical urban scenario, the process of admission of a student in a school often demands completion of a number of formalities. However, most of these formalities are largely bypassed in rural schools. For example, the formality of producing a birth certificate was required to be completed only by 4.5 percent of the students and the corresponding figures for admission test and parents' interview are only 3.0 and 2.2 percent, respectively. It is very likely that these formalities are generally relevant for private schools. Even the requirement of producing a transfer certificate which must be necessary when a student moves from a primary school to an upper primary one had to be met by only 9.7 percent of the students. These patterns are nearly the same for both boy and girl students. Across the districts, there are only marginal deviations from the overall trend.

Table 5.3 : Infrastructural facilitation at schools (School Survey)

Characteristic	Type of School		
	Primary	Upper Primary	All Schools
Percentage of School Having:			
Own Building	80.0	100.0	87.1
Pucca Building	90.0	100.0	93.5
Waterproof Building	80.0	90.0	83.9
Boundary Wall	45.0	72.7	54.8
Arrangements for Safe Locking	50.0	63.6	54.8
Adequate Light for Classrooms	90.0	100.0	93.5
Drinking Water Facility within School	70.0	81.8	74.2
Toilet Facilities	40.0	54.5	45.2

Separate Toilet Facilities for Girls	0.0	18.2	6.5
Electric Lighting	5.0	9.1	6.5
Adequate Playground	20.0	36.4	25.8
Blackboard in All classrooms	80.0	72.7	77.4
Adequate Library Facilities	0.0	9.1	3.2
Adequate Maps and Charts	25.0	81.8	45.2
Adequate Toys / Games Facilities	5.0	36.4	16.1
Adequate Teaching Kit	15.0	63.6	32.3
Average No. of Class Rooms	2.8	5.1	3.6

The hope raised by the reasonably adequate availability of elementary schools in Bihar, however, gets diminished when one finds that the existing infrastructural facilities in most of these schools are quite often very inadequate (Table 5.3). For the primary schools no less than one-fifth of the buildings are not owned by the school and an equal proportion of schools function in non-waterproof buildings. Indeed, in extreme cases, some primary schools function not from a building, but just under a tree or a make-shift shed. Half of the primary schools do not have a boundary wall and an equal proportion of schools function from buildings that cannot be safely locked. Some of the other major infrastructural deficiencies are — schools without drinking water facility within the premises (30 percent), without toilet (60 percent), without separate toilet for girls (100 percent), without blackboards in all classrooms (20 percent) and without adequate teaching kit (85 percent). The average number of classrooms in the primary school is only 2.8 for no less than five classes.

Consequently, the students of Standards I and II almost everywhere share a single classroom and such sharing is also necessary by students of Standard III and IV in many schools. To have the luxury of having a separate room for their classes, the students have to reach Standard V in most schools. Finally, it should be noted that in all the primary schools, there is no furniture in classrooms; the students have to sit on the floor which is generally uneven and dusty. The average number of students enrolled in a class, as was noted before, is 60. Thus, combining two classes in a single room demands a space for about 120 students. The average size of a classroom is rarely big enough to accommodate all of them. But if the schools are able to function even with such limited space, it is mainly because of a large number of students are absent from the school on a typical day.

In case of upper primary schools, the existing infrastructure is certainly better but some essential facilities are also needed in many schools. For example, about one-fourth of the upper primary schools do not have a boundary wall and about one-third of them cannot be safely locked. A few

other figures indicating serious infrastructural deficiencies in upper primary schools are — schools without drinking water facility within the premises (18.2 percent), without toilet (45.5 percent) and without separate toilet for girls (81.8 percent). Even in the case of infrastructural facilities that are directly related to teaching activities, one finds that 27.3 percent of the upper primary schools do not have blackboard in all classrooms and 36.6 percent of them do not have adequate teaching aid. As regards classrooms, an upper primary school has an average of 5.4 of them to accommodate eight classes. Here again, students of lower classes share their classrooms, so that those at the upper classes have separate rooms.

Under the Sarva Shiksha Abhiyan (SSA), funds are available for construction of school buildings and providing other infrastructural facilities in the elementary schools. Out of 31 sample schools, seven schools were found to have new buildings in last 10 years, with the SSA funds. At this pace, one cannot hope to have decent primary and upper primary schools in Bihar in near future.

Teaching personnel

A teaching institution basically comprises of its students and teachers, the physical infrastructure only facilitating their interaction. Thus, it is probably possible for a school to function properly even without a satisfactory physical infrastructure, but there cannot be any substitute for the teachers in a school. Unfortunately, the present survey shows that the strength of teaching personnel for the elementary schools in Bihar is very inadequate, even after the additional appointments that have been made by the state government in the recent years. Besides the teacher shortage, the teaching standard in these schools is further lowered because of several constraints that the teachers face while discharging their professional responsibilities.

Table 5.4 : Teacher strength and teacher attendance in schools (School Survey)

Characteristic	Type of School		
	Primary	Upper Primary	All Schools
Average no. of Sanctioned Post of Teachers	5.4	12.1	7.7
Average no. of Teachers in Position	3.6	7.1	4.9
Percentage of Posts Vacant	33.7	41.4	36.4
Average Teacher Attendance Last Week (%)	83.3	76.0	77.7
Average no. of Non-teaching Staff	0.0	0.0	0.0

(Administration)			
Average no. of Non-teaching Staff (Helper)	1.0	1.1	1.0

To begin with, we first note that the average number of teachers in a primary school in rural Bihar is only 3.6 (Table 5.4). To manage as many as five classes, a primary school needs at least five teachers and the average number of sanctioned posts in the primary schools is understandably 5.4. But the existing average strength of only 3.6 teachers implies that nearly one-third of the teachers' posts are vacant. Consequently, multi-grade teaching is very wide which is an obvious deterrent for quality learning inputs. In case of upper primary schools, the average number of teachers per school is 7.1. Since an upper primary school has eight classes, this teacher strength may appear to be relatively better compared to the primary school. But the number of teaching periods in upper primary schools is more and no teacher can afford to engage classes throughout the schooling hours; as such, teacher strength of 7.1 again implies serious teacher shortage in upper primary schools. That the educational administration is fully aware about the higher teacher requirement in upper primary schools is indicated by the average number of sanctioned posts of teachers in these schools which is 12.1. Against this sanctioned strength, the teacher shortage in upper primary schools is more than 40 percent. To make the already unsatisfactory teacher strength into an even more difficult one, the attendance of teachers in the schools is not very regular; in the week just preceding the day of survey, the average attendance of primary school teacher was 83.3 percent and that of upper primary school teachers was even lower at 76.7 percent. Applying these attendance ratios on the average number of employed teachers, it emerges that the average effective teacher strengths on a typical working day in elementary schools in rural Bihar are — 2.9 teachers in primary schools to engage five classes and 5.4 teachers in upper primary schools to engage eight classes. Comparing these average effective teacher strength with the average sanctioned strength, it emerges that the primary schools operate with only half of the required teacher strength; in upper primary schools (many of which were primary schools earlier and upgraded recently), the situation is a even worse. This is undoubtedly a serious limitation of the present elementary schooling system in Bihar. At one hand, it demands recruitment of more teachers in both primary and upper primary schools and on the other it calls for efforts to reduce absenteeism among the employed teachers.

As regards the extent of non-teaching work required to be done by the teachers, one first notices that except a helper no elementary school in Bihar is provided with any administrative staff. Thus, management of MDMS and others administrative responsibilities of the schools take away some of the time of the teachers (Table 5.5). The teachers also have to devote part of their time to professional meetings and programmes and other educational activities. This is again unavoidable. But when teachers are temporarily shifted to the Education Department for

Table 5.5 : Information on the extent of non-teaching work by teachers (School Survey)

Characteristic	Type of School		
	Primary	Upper Primary	All Schools
Avg. no. of Teachers involved in non-teaching work last month due to			
Midday Meal Scheme (MDMS)	0.6	0.6	0.6
School Administration Work	0.5	0.6	0.6
BRC / Meeting / Programme	1.2	1.4	1.3
Deputation to Education Department	0.0	0.6	0.3
Other Educational Activities	0.4	0.2	0.3
Other Non-educational Activities.	1.0	1.9	1.3

administrative work or are used for various non-educational activities, this is certainly undesirable. The present survey has found that during the month just preceding the survey date, at least one teacher per primary school and two teachers per upper primary school were involved in such non-educational activities at least once. Earlier this practice was wider, but in response to the public disapproval of teachers being employed for non-educational activities it appears that the practice is now lessened but not altogether abolished. One should also note here that the practice of teachers being involved in works that is educational in nature, but not actually teaching, would not have affected much if the sanctioned posts of all the teachers were filled up. But that is not the case for elementary schools in Bihar.

Profile of teachers

In a society where the overall educational standards are low, it is very likely that the social profile of the school teachers will be different from that of the students, majority of who are from

disadvantaged sections of the population. But if this social distance is too wide and no effort is made to reduce it, this is almost certain to affect the overall learning environment in the schools. Decades earlier, this social distance was much wide in Bihar but it has fortunately been gradually reduced over the years.

Table 5.6: Profile of teachers by sex, religion/caste background and secondary occupation (School Survey)

Characteristic	Type of School		
	Primary	Upper Primary	All Schools
Percentage Distribution by Sex			
Male	60.5	63.3	61.9
Female	39.5	36.7	38.1
Total	100.0	100.0	100.0
Percentage Distribution by Religion / Caste			
Upper Caste Hindu	18.4	21.5	20.0
Backward Caste Hindu	44.8	64.6	54.8
Scheduled Caste / Tribes	19.7	11.4	15.5
Muslims	17.1	2.5	9.7
Total	100.0	100.0	100.0
Percentage Distribution by Secondary Occupation			
Cultivation/Animal Husbandry	32.9	45.6	39.4
Commercial Business	6.6	7.6	7.1
Other Occupations	9.2	13.9	11.6
Social Work	15.8	3.8	9.7
No Secondary Occupation	35.5	29.1	32.2
Total	100.0	100.0	100.0

Taking gender-wise distribution of elementary school teachers first, the present survey has found that female teachers now account for close to 40 percent of the total strength of teachers, their presence being slightly higher among teachers in the primary schools (Table 5.6). This estimate is very close to the official data which reports the percent of female teachers to be 35.8 percent (Table 2.6). During the appointment of additional teachers since 2005-06, 50 percent of the posts

were reserved for females and this has greatly helped in ensuring a reasonably high proportion of females in the total teacher strength. When one analyses the percentage distribution of teachers in elementary schools by their religion and caste, it emerges that the dominance of the upper caste Hindus in the elementary schools in Bihar, a phenomenon that was present in the not too distant past, is now considerably reduced. Presently, only about one-fifth of the elementary school teachers in Bihar belong to the upper caste Hindus, and this share is only a little more than their share in the overall population. The disappearance of the dominance of upper caste Hindus among the teachers has implied that a sizeable proportion of the teachers are now from the disadvantaged section of the population, including the scheduled caste/tribes or Muslims. A comparison of the religion and caste profile of the teachers of primary and upper primary schools, however, indicate that the presence of teachers from the disadvantaged sections is much less in upper primary schools, where scheduled caste/tribes account for only 11.4 percent of the teacher strength and the share of Muslims is even lower at only 2.5 percent. Presumably, it is their relatively lower educational achievement which stands in the way of being employed in upper primary schools. Interestingly, the space left open by such disadvantaged sections of the population in teachers' appointment in upper primary schools is now filled less by upper caste Hindus and more by the backward or middle caste Hindus who have acquired some additional social and political advantages in recent decades. In view of the recent trend, one can safely hope that the representation of the disadvantaged section of population among the school teachers will be even wider in coming years.

The professional efficiency of a person, including an elementary school teacher, is very likely to be affected if he/she has more than one profession to pursue. In the rural areas of Bihar, where land-based occupations are very common, it is very likely that many teachers in elementary schools have a secondary occupation which could be either land-based or otherwise. From the percentage distribution of teachers by their secondary occupation, presented at the bottom of Table 5.6, it is actually confirmed that cultivation or animal husbandry is a secondary occupation for no less than 39.4 percent of elementary school teachers in rural Bihar. In addition, there are another 28.4 percent teachers who have other kinds of secondary occupation, including social work. This leaves only 32.2 of the teachers who pursue their teaching profession without any

distraction. This is certainly undesirable. Between the teachers of primary and upper primary schools, it is the latter group among whom a secondary occupation is more common; teachers without a secondary occupation account for 35.5 percent of the primary teachers and a lower 29.1 percent of the upper primary teachers.

Table 5.7: Profile of teachers by academic qualification and professional training (School Survey)

Characteristic	Type of School		
	Primary	Upper Primary	School
Percentage Distribution by Academic Qualification			
Secondary	15.8	6.3	12.3
Higher Secondary	40.8	35.4	39.5
Graduation	34.2	32.9	33.1
Post-graduation	9.2	25.3	15.1
Total	100.0	100.0	100.0
Percentage of Teachers Professionally Trained	60.5	70.9	63.6

Yet another limitation of the elementary school teachers in Bihar is their inadequate academic qualifications (Table 5.7). One would normally expect graduation to be the minimum qualification of a teacher in both primary and upper primary schools. But in the primary schools of rural Bihar only 43.4 percent of the teachers are graduates, remaining ones completing either higher secondary (40.8 percent) or even lower level of just secondary (15.8 percent). For the teachers in upper primary schools, their educational background is indeed higher, but even here the combined share of graduate and post-graduate teachers is only 58.2 percent; some of the teachers (6.3 percent) are just secondary passed. It is very likely that many of the teachers in upper primary schools (which also have a primary section) are asked to teach lower classes, with upper classes being taught by graduate teachers. Although it is now fully appreciated that a professional training is necessary for any educated person to become an effective teacher, a large number of elementary school teachers in Bihar are seen to lack such training. In the upper primary schools, the proportion of trained teachers is 70.9 percent and for the primary schools the corresponding figure is even lower at 60.5 percent. During the bulk appointment of teachers

in recent years, professional training was not considered as a requisite qualification; consequently, about one-third of the present elementary school teachers in Bihar are devoid of professional training.

Problems of teachers

Many of the problems of the elementary education system in Bihar, as discussed above, are felt by the teachers first, which in turn affect the students' educational progress. On being asked to mention their major problems, teachers have mentioned a number of them (Table 5.8). Two of these problems have already been mentioned before — poor infrastructure (mentioned by 67.7 percent of teachers) and shortage of teachers (mentioned by 64.5 percent of teachers). Added to that, 51.6 percent of the teachers mention that irregular payment of salary is also a major problem for them. This problem is certain to be even more serious for those newly appointed teachers who are paid relatively lower salaries. Two other problems which have been underlined by the teachers again relate to two systemic deficiencies that have been discussed earlier viz. lack of teaching aid and too much of non-teaching work. These problems, one can easily realise, are all genuine ones and can be redressed only by the educational administration and, in

Table 5.8: Information on problems faced by teachers (School Survey)

Problems	Type of School		
	Primary	Upper Primary	All Schools
Percentage of Schools where Teachers Face Problems Due to			
Poor Infrastructure	65.0	72.7	67.7
Lack of Teaching Aid	30.0	9.1	22.6
Shortage of Teachers	55.0	81.8	64.5
Harassment by Authorities	0.0	0.0	0.0
Too Much Non-teaching Work	20.0	27.3	22.6
Lack of Parental Cooperation	10.0	18.2	12.9
Irregular Salary Payment	55.0	45.5	51.6
Inadequate Toilet Facilities	5.0	0.0	3.2

most cases, it will demand some additional financial resources. In case of female teachers, there are a few additional difficulties (Table 5.9). In the discussion on infrastructural facilities

earlier, it was reported that separate toilet for girls is available in none of the primary schools and only in 30 percent of the upper primary schools. For female teachers, this implies a serious difficulty. In the absence of any public transport system in rural areas, commuting between the residence and school gets strenuous and time-taking, particularly for women. In case of upper primary schools, this difficulty in commuting to work was reported as an additional difficulty for

Table 5.9: Information on additional difficulties faced by female teachers (School Survey)

Characteristic	Type of School		
	Primary	Upper Primary	All Schools
Percentage of Schools where Female Teachers Face Difficulties Regarding			
Commuting to Work	0.0	18.2	6.5
Harassment by Male Teachers	5.0	0.0	3.2
Negative Attitude of Parents	5.0	9.1	6.5
Harsh Living Conditions in Villages	5.0	0.0	3.2
Inadequate Toilet Facilities	30.0	45.5	35.5

female teachers. Fortunately, this problem was not present for female teachers in primary schools. Other problems of female teachers include harassment by male teachers, negative attitude of parents, and harsh living conditions in the village, but fortunately, they were mentioned by only a limited number of respondents.

Table 5.10 : Level of job satisfaction among teachers (School Survey)

Characteristics	Type of School		All Schools
	Primary	Upper Primary	
Percentage of Schools where Teachers Report Satisfaction with respect to			
Salary Level	5.0	36.4	16.1
Amount of Leave	95.0	81.8	90.3
Parental Appreciation	25.0	72.7	41.9
Work Environment	60.0	81.8	67.7

It is quite apparent from the foregoing account of the functioning of schools that the elementary school teachers in Bihar have to function under very difficult circumstances, it is therefore not

surprising that the level of job satisfaction for them is very low (Table 5.10). The only aspect of their job which they enjoy is the amount of leave they are entitled to. For every other aspect, the level of satisfaction was low. It was indeed the lowest for their salary levels, an aspect which carries substantial weightage in deciding the overall level of job satisfaction, in view of the low level of income for rural households. Only 16.1 percent of the teachers in elementary schools in rural Bihar were satisfied with their salary levels. It should be mentioned here that in contrast to the teachers who were appointed earlier on higher salaries, the newly appointed teachers are paid much lower salaries. Since most of the new teachers were appointed in primary schools, it is not surprising that only 5.0 percent of the primary school teachers are satisfied with their salaries compared to 36.4 percent of teachers in upper primary schools. The second important reason for poor job satisfaction among teachers in elementary schools in Bihar is lack of parental appreciation. However, that the teachers are at least mindful of parental appreciation allows one to hope that given proper working conditions they would strive for that appreciation. The poor working environment is also mentioned by a substantial number of teachers as a reason for the low level of their job satisfaction. From a comparison of the job satisfaction level of teachers from primary and upper primary school, it clearly emerges that those teaching in the upper primary schools are relatively more satisfied than their counterparts in primary schools. This is quite expected because besides better salaries the infrastructural facilities are better in upper primary schools and, secondly, the students there are probably more serious about their studies, having completed their primary education.

Teaching-Learning process

The professional profile of the teachers of elementary schools in rural Bihar, presented earlier, did indicate that their average educational level was less than adequate and, secondly, at least one-third of them did not receive any professional training in teaching. The consequence of such limited professorial competence is reflected in the kind of pedagogic practices that teachers adopt in elementary schools (Table 5.11). In primary schools, the extremely effective method of working on the blackboard is used by 80.0 percent of the teachers, but not all of them. Similarly, explaining verbally is another effective method of teaching, but only 70.0 percent of the teachers are reported to practice this method. Giving exercise to the students is also an effective, but in many cases this method is used to keep the students apparently busy when there is no

Table 5.11: Teaching methods used by teachers (School Survey)

Characteristics	Type of School		All Schools
	Primary	Upper Primary	

Percentage of Teachers who Use the Method of			
Working on Blackboard	80.0	81.8	80.6
Reading from Textbook	90.0	90.9	90.3
Giving Exercises	85.0	45.5	71.0
Explain Verbally	70.0	100.0	80.6
Asking Students to Read Loud	5.0	27.0	12.9
Asking Good Students to Explain to Weak Ones	0.0	18.2	6.5

teacher to engage the classes. In the upper primary schools, the teaching methods adopted by the teachers are noticeably different, but it does not probably mean an improvement. For example, the use of blackboard is also not universal in upper primary schools and the traditional methods (reading from textbook, asking students to read loud or asking good students to explain to weaker ones) are also widely used here. Fortunately, explaining verbally to students, one of the most desirable teaching methods, is used by all teachers in upper primary schools.

Table 5.12: Evaluation system in schools (School Survey)

Evaluation Systems	Type of School		All Schools
	Primary	Upper Primary	
Percentage of Schools Holding Formal Test			
Once a Year	10.0	9.1	9.7
Twice a Year	70.0	63.6	67.7
More than Twice a Year	20.0	27.3	22.6
Total	100.0	100.0	100.0

An important part of the learning process in any school is the system of evaluation which has the dual objective of knowing the progress of the students as well as promoting the successful students to the next higher class. The usual practice for such learning test is to hold it twice in a year, once sometime during the middle of the academic year and the second towards its end, the performance in the latter deciding whether the student should be promoted to the next class or not. The present study has found that this practice is followed by nearly two-thirds of the both primary and upper primary schools (Table 5.12). Holding more frequent learning tests is probably indicative of teachers being more mindful of the progress of the students. In the study, it was found that about one-fifth of primary schools and one-fourth of the upper primary schools conducted tests more than twice a year. On the other end, about one-tenth of both primary and upper primary schools were found to have conducted learning test only once in a year which is

indeed too long an interval to monitor children's educational progress. Further investigations had revealed that schools with relatively higher teacher strength hold evaluation tests more frequently, just as those operating with acute teacher shortage are forced to conduct only one test in a year, which is the bare minimum. The teachers in elementary schools in Bihar are often accused of lack of professional commitment. But these information about the frequency of evaluation tests in different schools indicate that once provided with proper working environment, teachers can substantially improve their performance.

A student not able to learn his/her lesson properly obviously fares poor in the learning test which is a negative feedback for the students. But teachers also provide negative feedback to students during teaching hours, either for poor performance or for indiscipline, through punishments of various degrees. In a school with proper learning environments, the necessity for such punishment will obviously be very limited, except for occasional scolding. Such scolding is very often done by the elementary school teachers in Bihar; but in addition they also resort to more severe punishments like holding of ears, slapping or hitting with a stick (Table 5.13). Holding of ears is more common, reported by 67.8 percent of the teachers, while the more severe punishment of slapping or hitting with a stick is reported by 19.4 percent of the teachers. A comparison of the punishment pattern between the primary and upper primary schools indicates that the practice of punishment is wider in the former. This is not surprising since many of the younger students in the primary schools are yet to imbibe the disciplines that a teacher expects from his/her students.

Table 5.13: Modes of punishment for students (School Survey)

Modes of Punishing	Type of School		All Schools
	Primary	Upper Primary	
Percentages of Schools Reporting Punishment of Students through			
Scolding	85.0	72.7	80.6
Slapping/Hitting with Stick	25.0	9.1	19.4
Holding of Ears	75.0	54.6	67.8
Detention after School	0.0	0.0	0.0
Sending the Students to Home	0.0	9.1	3.2

Private tuition

In view of the unsatisfactory functioning of the schools and the social disadvantages that many students suffer from, the practice of private tuition is fairly wide in rural Bihar. As reported before (Chapter IV), nearly one out of every four boy students and one out of every 10 girl students in rural Bihar receive private tuition. On being asked about their opinion of the practice of private tuition, no less than 58.1 percent of the teachers have mentioned it as a desirable phenomenon (Table 5.14). Among the teachers in upper primary schools, they had either thought it to be desirable (45.5 percent) or were indifferent to the practice (54.5 percent), none of them opining it to be undesirable. In contrast, the opinions of the primary teachers were more divided — desirable (65.0 percent), indifferent to the practice (15.0 percent) and undesirable (20.0 percent). The survey did not enquire about the reasons for desirability of private tuition from those teachers who had thought it to be so, but it is very likely that these teachers are quite aware about the inadequacy of learning inputs that the students are able to acquire at their schools. As regards the number of teachers that offer private tuition, it was found to be only 6.6 percent among the primary school teachers and 10.4 percent among those employed in upper primary schools. These proportions are indeed low, compared to the proportion of students

Table 5.14: Opinion of teachers about private tuition (School Survey)

Characteristics	Type of School		All Schools
	Primary	Upper Primary	
Percentages of Teachers Who Think Privation Tuition to be			
Undesirable	20.0	0.0	12.9
Desirable	65.0	45.5	58.1
Indifferent to the Practice	15.0	54.5	29.0
Total	100.0	100.0	100.0
Percentage of Teachers who give private Tuition	6.6	10.4	7.5

receiving private tuition, as reported earlier. It is very likely that since many elementary school teachers have a secondary occupation to pursue, they do not find private tuition as a profitable activity. This also leads to the conclusion that a large number of private teachers in rural Bihar are probably moderately educated unemployed youth.

Supervision of functioning of schools

The elementary schooling system in Bihar comprises both a large number of primary and upper primary school as well as administrative functionaries at the state, district and block levels. In the recent years, although there has been a substantial increase in the number of schools, there has not been a commensurate increase in the number of administrative functionaries. This is likely to hamper the proper supervision of the functioning of schools. In this background, it is interesting to note that the frequency of the visits of education officials to the schools is quite high (Table 5.15). The average number of visits per school during the year preceding the date of survey was 1.5 for upper primary schools and even higher at 2.4 for primary schools. Only 10.0 percent of primary schools and 18.2 percent of upper primary schools were not visited even once during the last year. However, when one cares to know what activities are undertaken by the visiting officials, it becomes apparent that these visits generally imply just the completion of an administrative formality. The officials do inspect the registers of the school and occasionally observe the classroom teaching, but they show extremely limited interest in knowing the operational problems that the schools face. During the survey, the teachers have often mentioned that if the visiting officials regularly inform the higher officials about the problems of the schools, it could remove at least some of these problems. But, unfortunately, the visiting officials are generally oblivious of these responsibilities. One may also note that such inadequate supervision of functioning of schools by education officials is found not only for the primary schools which are rather large in number, but even for the much smaller number of upper primary schools.

Table 5.15: Information on visits of education officials to schools (School Survey)

Frequency of Visits / Activities	Type of School		
	Primary	Upper Primary	School
Percentage of Schools not visited at all last year	10.0	18.2	9.7
Average no. of visits per schools last year	2.4	1.5	2.1
Percentage of Schools Reporting different activities during School visit			
Inspection of Registers	80.0	81.8	80.6
Noting of infrastructure Needs	5.0	9.1	6.5
Discussing on School Problems	10.0	9.1	9.7

Noting of Teacher Shortage	10.0	27.3	16.1
Observation of Classroom Teaching	30.0	36.4	32.3

In the recent years, the *Mukhiyas* of *Gram Panchayats* have been given some responsibilities about supervision of the functioning of elementary schools. Although the survey did not collect any information from the *Mukhiyas* about how they were discharging those responsibilities, the heads of the sample households were asked to evaluate the functioning of the local primary schools. It is very likely that the *Mukhiyas* take into account these evaluative opinions while deciding about any intervention by them. From Table 5.16, presenting the results of parental evaluation of school and teachers, it emerges that only 14.1 percent of the parents are satisfied with the functioning of local primary school. Among the districts, it is only Madhubani where the primary schools are seen to function a little better. On being asked the reason for their dissatisfaction, the parents have equally stressed on the infrastructural deficit and the poor teacher performance. These clearly show that the parents are fully aware about the conditions under which a school performs properly and their evaluations are indeed rational. On being asked specifically about the teacher performance, only 16.7 percent of the parents have found it to be satisfactory. In the next step, when the parents were asked about the reasons for not being satisfied with the performance of teachers, nearly half the parents have pointed towards the lack of seriousness of the teachers, remaining ones mentioning either poor attendance or poor teaching ability. Taking into account the parental evaluation of both schools and teachers, it appears that the parents are more critical of the role of teachers than infrastructural deficiencies. It is, therefore, very necessary that the state government should plan some innovative steps to ensure the cooperation of teachers in improving the elementary education in Bihar.

Table 5.16: Information on parental evaluation of schools and teachers

Characteristic	District					All Respondents
	Bhojpur	Gopalganj	Bhagalpur	Madhubani	Katihar	
Percentage of Respondents Satisfied with Local Primary School	11.4	7.2	15.4	26.1	10.1	14.1
Reasons for Not being Satisfied with Local Primary School						
Poor Infrastructure	20.6	34.5	31.6	72.7	81.7	33.9
Poor Quality of Teaching	46.8	34.1	42.1	9.9	0.0	34.2
Lack of Seriousness of Teacher	21.3	6.9	8.0	9.1	10.0	13.0
Others	11.3	24.5	18.3	9.1	8.3	18.9

Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage of Respondent Satisfied with Teacher performance	9.0	6.7	14.3	31.5	11.7	16.7
Reasons for Not Being Satisfied with Performance of Teachers						
Irregular Attendance	39.5	0.0	17.0	31.8	13.5	22.1
Poor Teaching Ability	30.2	25.0	21.3	25.0	27.0	26.7
Lack of Seriousness	30.2	75.0	61.7	39.8	59.5	49.8
Others	0.0	0.0	0.0	0.0	0.0	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Incentive schemes

For the students in the elementary schools, as mentioned before, there are a number of incentive schemes — no tuition fee, free text books, scholarships for scheduled caste/ tribe students, Midday Meal Scheme (MDMS), and free uniform for students in classes III-V. For girl students in classes VI-VIII, the incentive of free uniforms is continued. The extent of coverage of these incentive schemes is indicated in Table 5.17.

It appears from the above table that the coverage of MDMS is rather high in Bihar, benefiting no less than 75.0 percent of the students in elementary schools. But this figure actually relates to students who had 'ever benefitted' by MDMS. If separate estimates were available to indicate the percentage of students who have been benefitted in the recent past (say last week), it would indeed be much lower. The implementation of the MDMS has worsened over the years in terms of regularity of serving of meals; in addition, during the field survey, a number of villagers had complained about the quality of the meals. It was also mentioned by many villagers that the supervision by Vidyalay Shiksha Samity (VSS) plays an important role in ensuring the proper implementation of MDMS.

Table 5.17: Extent of coverage of various incentive schemes (Household Survey)

Characteristic	District					Sex		All Children
	Bhojpur	Gopalganj	Bhagalpur	Madhbani	Katihar	Boys	Girls	
Percentage of Eligible Students ever Benefitted by								
Midday Meal Scheme	79.8	80.5	82.4	70.0	62.1	74.7	75.5	75.0
Free Textbooks	63.5	82.3	59.6	57.4	73.0	70.4	73.0	71.7
Free Uniform	32.5	50.2	57.2	46.5	57.4	36.5	62.3	48.6

Scholarship	36.4	21.1	39.7	88.7	46.5	44.6	47.1	45.9
-------------	------	------	------	------	------	------	------	------

Providing free textbooks to the students in elementary schools is an old incentive scheme of the state government; but, unfortunately, even now its coverage is not universal. The survey results indicate that only 71.7 percent of the students have received all their textbooks, the remaining students receiving only some of them. It is quite possible that some of the students have not received all their textbooks because they have been enrolled only recently. But ideally, each school should have enough number of books in their stock, so that each student is provided with all the textbooks right after their enrolment. The scholarship for scheduled caste/tribe students is yet another old incentive scheme, but its coverage was found to be only partial (45.9 percent) by the present survey. The recent spurt in the enrolment in elementary schools in Bihar has obviously included a large number of students from among the scheduled castes/tribes. It appears that the state government has not correspondingly enhanced its fund allocation for the scholarship scheme, resulting in its partial coverage.

The state government's recent scheme to provide free uniform to students to enhance enrolment in elementary schools, it emerges from the survey, has already benefitted a substantial number of students (48.6 percent). Interestingly, it has benefitted the girl students even more (62.3 percent) than the boy students (36.5 percent). This is primarily because the implementation of the schemes in the upper primary schools (where only girls are eligible) is much wider than in primary schools (where both the boy and girl students in classes III-V are eligible). From the discussion that the survey team had with many villagers, it was quite apparent that this scheme is very popular and it has contributed substantially to higher enrolment and attendance of the students in schools. Presently, nearly half the students are excluded from the scheme. If, with adequate funds, the state government is able to attain universal coverage of the scheme, it can further strengthen the elementary education in Bihar.

CHAPTER VI

Participation in School Governance

In all social activities, including education, community participation plays an important role. As the main stakeholders of the system, its participation in the governance of the schools is almost certain to increase public awareness, help in better and more transparent administration, and also ensure better accountability of the schools. Admittedly, there are some elementary schools, generally in the urban areas, which function reasonably well even without much community participation. This is possible only when the community is socially or educationally so advanced that problems like non-enrolment of young children, their irregular attendance in schools, or lack of learning inputs at home are very marginal. But in a typical rural scenario, particularly in Bihar, these problems are very acute and an effective elementary schooling system here demands a social mobilisation process that teachers and education officials cannot manage. Under the SSA framework, therefore, community participation is underlined as a crucial requirement for effective school management.

In Bihar, an institutional arrangement for community participation in the management of elementary schools was planned by the state government in 2000. Under this arrangement, the constitution of a Vidyalay Shiksha Samity (VSS) is mandatory for all elementary schools in Bihar. As per the statute, each VSS should have 15 members — parents (9), non-parents (3), representative of local PRI (2) and the headmaster (1). These members are to be so chosen that there is adequate representation of women and members of other disadvantaged social groups in the VSS.

Composition of VSS

The present survey has found that except in two primary schools, which were established very recently, a VSS was formed in all other schools (Table 6.1). However, most of these VSSs were formed in 2007 or earlier and after completing their tenure of three years they have now become dysfunctional. It was also found from the survey that in only 42.9 percent of the schools (53.3 percent for primary schools and 30.8 percent of upper primary schools), the VSS was formed democratically in a village meeting. In the remaining schools, its members were selected either by a few influential persons in the village and the teachers (3.6 percent) or by the government officials or teachers (53.6 percent). It is very likely that when a VSS is formed bypassing the mandated democratic process, distorting its representative character, it ceases to become an instrument for community participation.

Table 6.1 : Percentage distribution of schools by year of establishment of VSS (VSS Survey)

Year of Establishment	Type of School		
	Primary	Upper Primary	All Schools
Before 2006	13.4	23.1	17.8
2006	33.3	7.7	21.4
2007	33.3	53.8	42.9
2008	10.0	15.4	12.1
VSS Not Formed	10.0	0.0	5.8
Total	100.0	100.0	100.0

Table 6.2: Percentage distribution of schools by the process of formation of VSS (VSS Survey)

Process of Formation	Type of School		
	Primary	Upper Primary	All Schools
Decided in Village Meeting	53.3	30.8	42.9
Decides by Few Persons and Teachers	0.0	7.7	3.6
Decided by Government Officials and Teacher	46.7	61.5	53.6
Total	100.0	100.0	100.0

Since the VSSs are presently dysfunctional in Bihar schools, the survey could not collect information about how they are discharging their given responsibilities now. But one can possibly get an idea about the nature of community participation in rural schools in Bihar from the way VSS had functioned in the earlier year that is before the end of their tenure (Tables 6.3 to 6.8). As regards the composition of the VSS (Table 6.3), it is observed that the representation of women and the disadvantaged sections of the population are substantial. One the one hand, women constitute 36.8 percent of the total number of VSS members (38.2 percent in primary schools and 35.1 percent in upper primary schools); on the other, scheduled castes / tribes and Muslims together account for 37.3 percent of all VSS members (31.6 percent in primary schools and 44.5 percent in upper primary schools). But when one considers the educational background of VSS members, it emerges that only about one-third of them (37.4 percent) have passed matriculation. Among the rest of the members of VSS, no less than 16.2 percent are just illiterate. With a deep sense of commitment, it is not unlikely even for an illiterate or moderately literate member of VSS to contribute to its functioning, but with a decent educational background they could certainly be more useful to the VSS.

Table 6.3: Profile of VSS members (VSS Survey)

Characteristic	Type of School		
	Primary	Upper Primary	All Schools
Percentage Distribution of VSS Member by			
Sex			
Male	61.8	64.9	63.2
Female	38.2	35.1	36.8
Total	100.0	100.0	100.0
Religion and Caste Group			
Upper Caste Hindus	12.7	8.8	11.0
Backward Caste Hindu	55.6	46.8	51.7
Scheduled Caste / Tribe	24.1	27.5	25.6
Muslims	7.5	17.0	11.7
Total	100.0	100.0	100.0
Educational Background			
Illiterate	15.6	17.0	16.2
Just Literate	30.7	21.1	26.4
Below Matriculation	20.7	19.3	20.1

Matriculation	15.6	23.4	19.1
Above Matriculation	17.4	19.3	18.3
Total	100.0	100.0	100.0

Functions of VSS

A number of VSSs, as mentioned before, were formed bypassing the democratic process, but these committees had indeed tried to play their role effectively. For example, no less than 75.0 percent of them used to meet monthly and such monthly meeting was even wider (80.0 percent) among the VSSs of primary schools (Table 6.4). One also reaches a similar conclusion from the attendance pattern in VSS meetings. For a committee of 15 members, an average attendance of more than 10 should be considered as adequate and this level of attendance is reported by nearly half of the VSSs (46.5 percent) (Table 6.5). The functioning of VSSs of primary schools was found to be relatively better in terms of the frequency of meetings; but in terms of the attendance of members in those meetings, it is relatively higher for upper primary schools where in more than half of the meeting, the attendance exceeds 10 members. On being asked the reasons for not attending VSS meetings, most of the members had expressed frankly that they were not interested in those meetings. This was true of female members (67.9 percent), scheduled caste/tribe or Muslim members (64.3 percent) as well as parent members (71.4 percent). For some of the VSS members, the reason for non-attendance was lack of awareness, implying that they did not know about the responsibilities of the VSS.

Table 6.4: Percentage distribution of schools by frequency of VSS meeting (VSS Survey)

Frequency of Meeting	Type of School		
	Primary	Upper Primary	All Schools
Monthly	80.0	69.2	75.0
Bi-monthly	6.7	7.7	7.1
Quarterly	6.7	15.4	10.7
Others	6.7	7.7	7.1
Total	100.0	100.0	100.0

Table 6.5: Percentage distribution of schools by average attendance in VSS meetings (VSS Survey)

Average Attendance	Type of School		
	Primary	Upper Primary	All Schools

Less than 8	33.3	7.7	21.4
8—10	26.7	38.5	32.1
11—12	20.0	38.5	28.6
Above 12	20.0	15.4	17.9
Total	100.0	100.0	100.0

From the responses about different issues that are generally discussed in a VSS meeting (Table 6.7), one can easily infer that the members of VSS are quite aware of the problems that schools generally face. Thus issues of their discussion included — finance, infrastructure, enrolment/dropout, absenteeism of both teachers/students, parental motivation, problems of teachers/students, quality of teaching and functioning of MDMS. It was not possible for the survey team to find out whether these discussions had ultimately led to any corrective action, but the list of issues discussed is indeed quite exhaustive, indicating the sensitivity of the VSS members to the attending problems of the elementary schools in rural Bihar.

Table 6.6: Reasons for low attendance of different categories of members in VSS meeting

Reasons for Low Attendance	Type of School		
	Primary	Upper Primary	All Schools
Female Members			
No Information	6.7	0.0	3.6
Lack of Awareness	26.7	7.7	17.9
No Interest in Meeting	60.0	76.9	67.9
Others	6.7	15.4	10.7
Total	100.0	100.0	100.0
Scheduled Caste / Tribe Members			
No Information	13.3	7.7	10.7
Lack of Awareness	0.0	0.0	0.0
No Interest in Meeting	60.0	69.2	64.3
Others	26.7	23.1	25.0
Total	100.0	100.0	100.0
Parent Members			
No Information	6.7	0.0	3.6
Lack of Awareness	13.3	7.7	10.7
No Interest in Meeting	53.3	92.3	71.4
Others	26.7	0.0	14.3
Total	100.0	100.0	100.0

Table 6.7 : Frequency of Discussion on Different Issues in VSS Meeting (VSS Survey)

Issues of Discussion	Type of School
----------------------	----------------

	Primary	Upper Primary	All Schools
Percentage of VSS Reporting Frequent or Occasional Discussion on			
Finance	46.6	69.3	57.1
Infrastructure	73.3	92.4	82.1
Promotion of Enrolment	73.4	92.3	82.2
Reduction of Dropout	60.0	92.4	75.0
Student Absenteeism	80.0	84.7	82.1
Parental Motivation	53.4	61.5	57.1
Problems of Student	53.3	69.2	60.7
Problems of Teachers	40.0	38.5	39.2
Quality of Teaching	46.6	61.6	53.6
Teacher Absenteeism	60.0	38.5	50.0
Midday Meal Scheme	80.0	92.3	85.7

Table 6.8: Percentage distribution of VSS by their most important activity (VSS Survey)

Characteristic	Type of School		
	Primary	Upper Primary	All Schools
Initiative for Improving Infrastructure	36.7	65.4	50.0
Promotion of Higher Enrolment and Lower Dropout	13.0	0.0	7.1
Improving Management of MDMS	20.0	11.5	16.1
Initiatives for Improving Teachers' Attendance	6.7	7.7	7.1
Discussion on Financial Matters	3.3	0.0	1.8
No Activity	20.0	15.4	17.9
Total	100.0	100.0	100.0

Finally, the survey had tried to find out whether VSS had undertaken any specific activity to improve the functioning of local schools. To this enquiry, the VSS members had mentioned a number of activities, the most important among them being the initiatives for improving the infrastructure of schools (50.0 percent). A second area of their intervention was the management of MDMS. Apart from shortage of teachers, as mentioned before, these are the two most important problems areas which demand additional attention in the rural schools of Bihar.

CHAPTER VII

Summary and Conclusion

Bihar is the third most populous state of India, next only to Uttar Pradesh and Maharashtra, with a population of 103.8 million (2011 census). This huge population would not have been a problem for the state if some of its other demographic characteristics were to its advantage. But that is not the case. In particular, the literacy rate in the state is only 63.8 percent (2011), compared to 74.0 percent for the entire country. The only ray of hope in this otherwise depressing situation is the faster spread of literacy in Bihar during 2001-11 than in India as a whole; the overall literacy rate in Bihar has increased by 17 percentage points during the last decade, compared to nine percentage points for the entire country. But in spite of this better performance during the last decade, the literacy rate is still the lowest in Bihar among all Indian states. If Bihar is able to maintain its present momentum in educational progress, it will hopefully achieve total literacy in about two decades, simultaneously with the rest of the country.

The depressing literacy scenario in Bihar is the accumulated impact of a long neglect of education by the government, starting from the colonial period. Unfortunately, even after independence, the colonial trend was allowed to continue through a development strategy which instead of reducing indeed widened the regional disparity through resource allocations that favoured the developed regions, pushing the disadvantaged states like Bihar further behind.

There seems to have been some change in that approach in recent years and, consequently, the central and state governments together are paying an enhanced attention to the education sector, particularly promoting elementary education through the Sarva Shiksha Abhiyan (SSA), launched in 2000-01. This effort had received another fillip in 2005 when the Midday Meal Scheme (MDMS) was universalised throughout the country, including Bihar. Although these two ambitious programmes had provided substantial support to different states for strengthening their elementary education systems, it had hardly made any impact in Bihar for several reasons. However, after the installation of a new government in 2005, some serious efforts were made to strengthen the elementary education in Bihar. The intention of the state government got reflected first when the Commission on Common Schooling System was constituted in 2006 with the objective of preparing a plan of action for implementing a system that would ensure the universalisation of elementary education by 2012-13. Unfortunately, the recommendations of the Commission were accepted by the state government only partially, mainly because of financial constraints. But starting from 2006-07, it had made a number of interventions in the state's elementary education system to improve its functioning. In this background, the present study is an attempt to assess the impact of those recent interventions, prepare an operation profile of elementary schools in Bihar, identify the organisational, social and infrastructural constraints of the schooling system and analyse the role of various stakeholders of the system.

Recent public interventions in elementary education

The most important intervention of the state government was to increase the number of schools and teachers. For schools, the intervention had two components — first, the establishment of new primary schools in unserved areas and, second, upgrading some of the primary schools to start upper primary classes. Thus, within three years, the availability of schools was just doubled — number of schools per one lakh population had increased from 60.2 in 2005-06 to 107.3 in 2008-09. Between the primary and upper primary schools, the expansion was larger for the latter — compared to 2.1 thousand upper primary schools in 2005-06, there were 27.2 thousand of them in 2008-09, implying a thirteen-fold increase. The expansion of primary schools, in contrast, was only 48.4 percent, from 51.7 thousand in 2005-06 to 79.8 thousand in 2008-09. The urgency for upper primary schools was to prevent the large number of dropout cases between Standards V and VI from occurring, because of the non-availability of such upper primary schools within a manageable distance in many villages.

Along with the expansion of schools, the state government had also decided to recruit 1.50 lakh additional teachers in elementary schools. By 2008-09, 1.18 lakh teachers were already appointed, bringing their number from 2.05 lakh in 2005-06 to 3.23 lakh in 2008-09. Since then, the position has improved further and, presently, there are 4.33 lakh teachers. However, the desired strength of elementary school teachers in Bihar is at least 6.00 lakh, implying a shortfall of about 27.8 percent.

Initially, the incentives for elementary education in Bihar included removal of tuition fee, free textbooks, and provision of scholarships for students belonging to scheduled castes/tribes. In recent years, MDMS was introduced as an additional incentive scheme for primary school students in 2001 and universalised in 2005 which was later extended to upper primary schools in 2008. However, the implementation of the programme is not very satisfactory. To promote elementary education further, the state government has introduced yet another scheme in 2005-06 which provides for free uniform to all students in Standards III-V (Rs 500 per student per year) and to only girl students in Standards VI-VIII (Rs 750 per girl student per year). This scheme has become extremely popular.

Achievement in child enrolment

The immediate consequence of the expansion of the schooling system was enhanced enrolment of children (6-14 years). The official data records that the Gross Enrolment Ratio (GER) for primary classes has increased from 92.1 in 2005-06 to 95.9 in 2008-09. In case of upper primary classes, the enhancement in GER was even higher — from 32.0 percent (2005-06) to 92.7 percent (2008-09). The overall enrolment ratio in elementary education, as obtained from the present survey, is found to be still higher — 98.1 percent for all children (6-14 years). From the share of three different types of schools in the total enrolment — government schools (94.1 percent), private schools (5.7 percent) and *Madarsas* (0.2 percent), it is apparent that government schools are still the main provider of elementary education in Bihar. Considering the high level of poverty in rural Bihar, a share of 5.7 percent for private schools is quite significant; but besides being a concern this is no less an opportunity for it clearly underlines a high parental preference for ‘quality’ education.

Child attendance

The enrolment of children, however, does not necessarily mean their regular attendance in schools. From the school records and household survey, one gets much varying estimates of school attendance, but it is very likely to be about 70-75 percent. Compared with the past, according to parents and teachers, there has been an improvement in the rate of attendance, but it needs to be improved further. Proper implementation of the MDMS along with other aspects of better schooling should contribute to a higher level of attendance, as has been the case elsewhere. As regards the reasons for absence, the teachers blame parental indifference and inadequate infrastructure or poor functioning of MDMS. The parents, on the other hand, identify domestic work, lack of interest of the child and illness as major reasons for children missing the schools. That illness is a major reason for irregular attendance is indeed alarming.

Level of learning

Because of several limitations, the learning achievements of the students are not satisfactory in Bihar. According to one indicator of learning viz. percentage of students passing the highest class, it was found to be only 40 percent for primary and 60 percent students for upper primary schools. These rates are indeed low and demand further strengthening of elementary education system in Bihar. However, an alternative estimate of transition rate for only the primary schools, obtained from the District Information System on Education (DISE), 2009-10, is 72.6 percent. But even this rate needs improvement.

Social segmentation of education

Many children are born to parents who are seriously disadvantaged, both economically and socially. On the one hand, poverty implies inadequate financial resources to support children's education; on the other, the social disadvantage in the form of parental illiteracy means that the young children are wholly dependent on learning inputs from the schools. This obviously leads to considerable social segmentation of education where, even with same educational infrastructure, children from different households are able to attain unequal educational standards. For perpetuating the social segmentation of education, what probably matters most is the parental education status of children. Taking into account the parental education status of children in rural Bihar, it is broadly estimated that the proportion of effective 'first generation learners' in Bihar will be around 60 percent. This is one of the most difficult challenges in Bihar.

The economic and social disparities among the parents, besides implying varying endowments, sometimes also imply attitudinal differences. For example, regarding the level of education desired for their children, both illiterate and literate parents report lower levels for girl child. To begin with, it is first observed that elementary education i.e. passing Standard VIII is considered to be insufficient by all parents, be it for boys or girls. But the gender discrimination is displayed thereafter. For example, the proportion of illiterate parents who would like their sons to be at least a graduate is more than double the corresponding proportion for their daughters. For the literate parents, although the proportion of them desiring at least a graduate degree for their children is much higher, the gender disparity is still as wide as is among illiterate parents.

One of the principal factors - perpetuating the social segmentation of education - is the availability of learning inputs at home for young children. It was found from the survey that nearly 40 percent of all school-going children are in need of some teaching help at home but are not able to receive it – either from parents/relatives or from private tutors. Such deficiencies for the disadvantaged social groups are most likely to widen the social segmentation of education. Unfortunately, the present elementary education system in Bihar does not allow for learning inputs at schools which are so adequate that it compensates for the absence of similar inputs at home.

Gender discrimination in education

The parents show considerable gender discrimination in favour of their sons in terms of the desired level of education. This indeed relates to their attitudes, not behaviour. From the responses related to their behaviour regarding the teaching help provided to their sons and daughters, one again observes considerable gender discrimination, both for teaching help provided by household members and engaging the services of a private tutor for such help. The discrimination was wider in terms of the latter viz. facility for private tuition. It emerges from the survey that while almost every one out of four boy students in elementary classes in rural Bihar has a private tutor, for the girl students it was available for only one out of 10. Finally, when one considers the private expenditure on children's education, it again emerges that the annual expenditure on boy students is considerably higher than that for girl students.

Functioning of schools

The educational progress of children depends on the environment at their homes on the one hand and on the schooling facilities available to them on the other. Unfortunately, the functioning of schools in Bihar is yet to attain a satisfactory standard.

Pre-School Education

To begin with, the pre-school education is a critical component of any effective education policy; by inculcating some desired habits and values, the pre-school education significantly contributes to retention of children in schools and raises their educational achievements. In Bihar, the major programme through which the task of pre-school education is addressed is the Integrated Child Development Scheme (ICDS) which also has a health and nutrition component. According to the latest official data, the total capacity of the existing AWCs is about 36 lakh, implying a coverage of only 41.8 percent. The present survey found the coverage of AWC to be only slightly higher. In response to the enquiry about why some children were not attending AWCs, it was found that in about half the cases, it was because of non-availability of AWC in the neighbourhood. Another important reason, mentioned by about one-fourth of the respondents, was irregular functioning of the centres.

School Infrastructure

Because of substantial increase in the number of elementary schools in Bihar since 2005-06, the children are now fortunate to have a school within a reasonable distance from their residence. But the hope that is raised because of wider availability of schools gets diminished when one finds that the existing infrastructural facilities in the schools are very inadequate. For the primary schools, not less than one-fifth of the buildings are not owned by the school and an equal proportion of schools function in non-waterproof buildings. Indeed, in extreme cases, some primary classes are held not in a building, but just under a tree or a make-shift shed. Some of the other major infrastructural deficiencies of the schools found in the survey are (i) without drinking water facility within the premises, (ii) without toilet, (iii) without separate toilet for girls, (iv) without blackboards in all classrooms and (v) without adequate teaching kit. The average number of classrooms in the primary school is only 2.8 for 5 classes. The students of Standards I and II almost everywhere share a single classroom and such sharing is necessary by students of Standards III and IV as well in many schools. Finally, it should be noted that in all the primary schools, there is no furniture in classrooms; the students have to sit on the floor which is generally uneven and dusty. The average number of students enrolled in a class is about

60. Thus, combining two classes in a single room necessitates the space for about 120 students. The average size of a classroom is never big enough to accommodate all of them. But if the schools are able to function even with such limited space, it is mainly because of large number of students are absent from the school on a typical day.

In case of upper primary schools, the existing infrastructure is certainly better, but some essential facilities are also wanting in many of the schools. For example, about one-fourth of the upper primary schools do not have a boundary wall and about one-third of them cannot be safely locked. A few other figures indicating serious infrastructural deficiencies in upper primary schools are — without drinking water facility within premises, without toilet and without separate toilet for girls. As regards classrooms, an upper primary school has an average of 5.4 of them to accommodate 8 classes. Here again, students of lower classes are required to share their classrooms.

Teaching Personnel

A school can possibly function even without a completely satisfactory physical infrastructure, but there cannot be any substitute for the teachers in a school. Unfortunately, the present survey shows that the strength of teaching personnel for the elementary schools in Bihar is very inadequate.

To begin with, the average number of teachers in a primary school is only 3.6, against the average number of sanctioned posts of 5.4 teachers. With nearly one-third of the teachers' posts lying vacant, multi-grade teaching is very wide which is an obvious deterrent for quality learning inputs. In case of upper primary schools, the average number of teachers per school is 7.1. Since an upper primary school has 8 classes, this teacher strength may appear to be relatively better. But the number of teaching periods in upper primary schools is more and no teacher can afford to engage classes throughout the schooling hours; as such, the teacher strength of 7.1 again implies serious teacher shortage in these schools. Against the sanctioned strength of 12.1 teachers per school, the teacher shortage in upper primary schools is more than 40 percent. To make the situation worse, the average attendance of school teachers was found to be 83.3 percent (primary) and 76.7 percent (upper primary). Applying these ratios on the average number of teachers, it emerges that the average 'effective' teacher strength on a typical working day in schools are — 2.9 teachers in primary schools and 5.4 teachers in upper primary schools. This

inadequate teacher strength in elementary schools is the result of government's inability to recruit more teachers at one hand and wide absenteeism among the employed teachers.

Considering genderwise distribution, the present survey found that female teachers now account for close to 40 percent of the total strength of teachers, their share being slightly higher among the teachers in the primary schools. During the appointment of additional teachers since 2005-06, 50 percent of the posts were reserved for females and this has greatly helped in ensuring a reasonably high proportion of females in the total teacher strength. In terms of their religion and caste background, it emerges that the dominance of the upper caste Hindus in the elementary schools in Bihar, a phenomenon that was present in the not too distant past, is now considerably reduced.

A secondary occupation for teachers is not desirable, but it was observed that cultivation or animal husbandry is a secondary occupation for no less than two-fifths of teachers. Taking into account other secondary occupation, it emerges that barely one-third of the teachers in elementary schools in Bihar pursue their profession without any distraction. Between the teachers of primary and upper primary schools, it is the latter group among whom a secondary occupation is more common. Yet another limitation of the elementary school teachers in Bihar is their inadequate academic qualifications. One would normally expect graduation to be the minimum qualification of a teacher in both primary and upper primary schools. But, in the primary schools of Bihar, only about two-fifths of the teachers are graduates; even in upper primary schools, the share of graduate teachers is only three-fifths.

In view of the unsatisfactory functioning of the schools and the social disadvantages that many students suffer from, the practice of private tuition is fairly wide in rural Bihar. The teachers, being fully aware of the inadequacy of the learning inputs at schools, also widely accept the practice as desirable. The survey revealed that only 6.6 percent of the primary school teachers and 10.4 percent among those employed in upper primary schools offer private tuition. These proportions are indeed low, compared to the proportion of students receiving private tuition. This leads to the conclusion that a large number of private teachers in rural Bihar are probably moderately educated unemployed youth.

Another important aspect of the functioning of the schools is the weak inspection system; of the total schools surveyed, 10 percent of the primary and 18 percent of the upper primary schools were not at all visited by any inspecting or other official during the year prior to the survey. Even when an education officials visits a schools, he/she rarely cares to know the operational difficulties of the schools and their visits are often just the completion of an administrative formality.

Incentive Schemes

Now, there are four incentive schemes for the students in elementary schools in Bihar — Mid-Day Meal Scheme (MDMS), Free Textbooks, Free Uniform and Scholarship. The first two are for all students, Free Uniform is for all students in Standard III-V and for girl students in Standards VI-VIII and, finally, the Scholarships are for students belonging to scheduled caste/tribes. The coverage of the first two schemes is more than 70 percent, but the coverage of the MDMS has shown some decline in recent years. In most of the surveyed schools, the programme was launched, but stopped later. In most of the schools, it was served irregularly and there were wide complaints about the quality of the meals served. Among the eligible ones, free uniform and scholarship are available to about half the students. A wider coverage of these schemes could further promote regular attendance of the students in the schools, now that enrolment is found to be near universal.

Participation in School Governance

The constitution of a Vidyalay Shiksha Samity (VSS) is mandatory for all elementary schools in Bihar. As per the statute, it should have 15 members — parents (9), non-parents (3), representative of local PRI (2) and the headmaster (1). Nearly all the schools in the sample had a VSS, but most of them have completed their term of three years. In the absence of fresh elections, these bodies are now dysfunctional. In addition to the VSS, the Gram Panchayats (GP) are also assigned some responsibilities to monitor the working of local elementary schools. The newly recruited teachers, popularly known as Panchayat Teachers, are also paid their salary by the GPs. But because of their other numerous responsibilities, the Mukhiyas are not able to pay any attention to the local schools. In fact, most GPs do not even care to form a Committee on Education, as mandated by the state government. However, the headmasters of about one-fourth of the sample schools reported that parents often provide help to the schools through ensuring attendance of students and even improving school infrastructure.

Conclusion

The elementary education system in Bihar has expanded considerably since 2006-07, in terms of both number of schools and teachers. Breaking from the earlier trend, Bihar has also witnessed a huge increase in the demand for education, a consequence of the social and political empowerment of the marginalized sections of the population in recent decades. These two developments together — expansion of the schooling system at one had and increased demand for education on the other — have resulted in the near universalisation of enrolment of children in the age-group 6-14 years. This is a major achievement in the educational sector of Bihar. With an increase of 17 percentage points in the state's overall literacy rate during the last decade (2001-11), the gains are already visible.

Simultaneously with this appreciable achievements, Bihar also now faces some challenges in the field of elementary education, since the attendance of students in the school is still low and their learning achievements are much below the desired level. One cannot hope to meet these challenges without a major change in the schooling system, some quantitative and others qualitative. Two of the most important constraints faced by the elementary schools in Bihar are — first, the shortage of teachers and, secondly, their inadequate physical infrastructure. If additional resources are not provided to remove these constraints, it may not be possible for the state to retain the present momentum in the educational sector that it had assiduously generated in recent years.

Once the schools are provided with decent infrastructure and adequate number of teachers, the different stakeholders of the schooling system will hopefully display more commitment, improving the overall functioning of the schools, particularly the absenteeism among the teachers and students. The major stakeholders of the elementary schools are parents, other members of the community and the teachers. There are two institutional mechanisms for the participation of the people in the governance of elementary schools — the Vidyalay Shiksha Samity (VSS) and the Gram Panchayat (GP). Unfortunately, the VSSs, after functioning for some years initially, have now become dysfunctional; the GPs, on the other hand, have been so preoccupied with their other tasks that education is still outside their focus. It is extremely desirable for the state government to activate the VSSs and enthuse the GPs to pay attention to the educational challenges.

For proper educational development of the children, parental attitude is obviously very relevant. With acquiring of even basic literacy skills, the parents can hopefully acquire a positive attitude towards their children's education. In this background, an important policy intervention could be a committed move towards enhancing adult literacy, particularly female literacy, which in turn will promote children's education.

The previous government in Bihar has recently been re-elected for another term. Their performance in the previous term has paid them valuable political benefits and one, therefore, hopes they will make further efforts to strengthen the elementary schooling system in Bihar and free the state of the evils of illiteracy. One very much hopes that this report would be useful for generating the much required public discussion and debate on the issue – an important requirement for the democratic functioning of the state.

Appendix A: List of Districts, Blocks, Gram Panchayats and Villages

District	Block	Panchayat	Village	Type of School
Bhojpur	Jagdispur	Harigaon	Madapur	PS
		Dawan	Munsi Tola	UMS
		Siakhan	Bairhi	UMS
	Udwantnagar	Karisath	Karisath (Harizantola)	NPS
		Choti Sasaram	Saraiyan	NPS
		Akana	Kalyanpur	PS
Gopalganj	Manjha	Bangra	Goniyar	UMS
		Gausiya	Dhama Pakar	PS
		Koini	Imaliya	PS
	Phulwaria	Pakauli Bado	Pakauli Bado	MS
		Mazirwa Kala	Bharpurwa	MS
		Koyla Deva	Srinagar	PS
Bhagalpur	Sabaur	Khankitta	Sultanpur Bhatti	PS
		Kamalkha	Chain Chak	PS
		Farka	Ghoshpur	NPS & MS
	Bihpur	Dharampur Ratti	Nanhkar	PS
		Babhan Gaon	Pathan Tola	PS
		Hario	Uttarwari Tola	NPS
Madhubani	Madhepur	Bheja	Teknatol	PS

		Parwalpur	Nlma	UMS
		Matras	Chapram	PS
	Benipatti	Manpur	Gamharia	MS
		Bishanpur	Bhagnatipur	PS
		Barri	Rajwa Tol	NPS
Katihar	Dand Khora	Soriya	Sihla	PS
		Bhamraili	Nepra	MS
		Raipur	Bigaili	UMS
	Barari	Bishanpur	Harinkol	UMS
		Gurmaila	Kunjnagar	PS
		Durgapur	Balughat	PS

Note : PS = Primary School / UMS = Upgraded Middle (Upper Primary) School / NPS = New Primary School