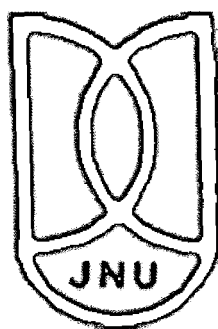


**DISPARITY IN ELEMENTARY EDUCATION IN INDIA:
A STATE LEVEL ANALYSIS**

Dissertation submitted to Jawaharlal Nehru University
in Partial fulfillment of the requirements
for the award of the degree of

MASTER OF PHILOSOPHY

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

The Indian Constitution recognizes education as one of the essential and critical obligations of the state. Under the Directive Principles of state policy, article 41 directs that “state shall within the limits of its economic capacity and development make effective provisions for securing the rights to work, to education and to public assistance in case of unemployment, old age, sickness and disablement and in other cases of unreserved want.”¹ Article 45 directs the state to endeavour to provide within a period of 10 years from the commencement of the constitution free and compulsory education for all children up to the age of 14 years. However, the right to education under the Directive Principle is not justiciable in court of law and, therefore if denied cannot be challenged in any court of law. A close scrutiny of Article 41 and 45 reveals that, while Article 41 merely expects the state to make effective provision for securing the right to education and that too within the limits of its economic capacity and development. Article 45 makes more strict demand on the state to provide education to all children up to the age of 14 years-‘within a period of ten years’ regardless of economic condition of the state. The phrase ‘endeavour to provide’ in this article refers to time frame within which the goal of free and compulsory education was to be accomplished.

However, in view of the vast difficulties involved, i.e. lack of adequate resources, disproportionate increase in population, resistance to the education of girls, general poverty of the people and illiteracy, and indifference of parents of scheduled caste, scheduled tribe and other backward classes (OBCs) adequate progress could not be achieved. It is sad that even after lapse of 50 years from the commencement of the constitution, the constitutional directives envisaged in Article 45 remain unfulfilled. “The Noble Laureate Prof. Amartya Sen rightly observed that primary education continued to remain as a gray land despite the substantial progress made by higher education in India”.²

¹. Pandey, Saroj (2002): “Education as a Fundamental Right in India”, *Perspectives in Education*, Vol.18, No.3, p140.

². Devraj, Chauhan (1997): “Education for all by 2000: Still a distant dream”, *Kurukshetra*, Vol. 45, No.15, September, p2.

The UNICEF in its report on “**State of world children 1999**” stated that India would be most illiterate country in the world by 2000 AD, a shameful distinction. Every third illiterate in the world is an Indian. Half of the school going primary school children in the age group of 5 to 11 years in our country is out of schools. “According to 1993 estimates of the 14.2 crores children in the age-group are eligible to enroll in primary schools. Of them only 9.8 crores are actually in the school. Out of 9.8 crores only 6.3 crores remained in school of which nearly 70 percent of girls are out of schools.”³

India has taken long strides in the spread and development of educational facilities especially during the plan period over the last 50 years. As a result, during 1961 only 13 percent of our people could read and write with understanding. During 1991, the percentage rose to 52 percent and to 64 percent in 2001(Census of India, 2001). But still hundreds of millions of Indians continue to be deprived of the opportunity to learn. International comparisons give another useful view of this bleak picture. In vast heterogeneous country like India, it is no mean achievement when compare with almost similar situations like China, Indonesia, Sri Lanka, Brazil and Mexico.

Our educational and literacy is lagging far behind from angle of quality. According to World Bank in India, the average adult has spent a little over two years at school, compared with five years in China, seven years in Sri Lanka and over nine years in South Korea. India appears in a poor light even compared with regions that are often considered here as backward: for instance, female literacy rates are much lower in India than in sub-Saharan Africa. The gross enrolment ratios (GERs) in urban areas may be higher in selected Indian states, but the GER in rural India is comparable to that seen in much of Africa. The net enrolment rate (NER) is also generally comparable. Tamil Nadu, a relatively high-achiever state, has indicators that are comparable with high enrolment countries such as Zimbabwe and Kenya, but the indicators for the rest of the Indian states are similar to those observed in rest of Africa. So, we in India are still not able to provide all our children in the age group of 6-14 years free and compulsory education. Of the 173 countries in the world, India ranked 124 on the human development index (HDI) in 2000 and United Nations Development Programme (UNDP) in 2002.

³. “Damning Statistics on Primary Education”, *The Hindu*, December 26, 1988, p12.

The elementary education provides basic foundation to man to become educationally sound, and politically, economically and socially empowered. “The economic returns to primary education are estimated to be not only positive and high, but also higher than returns to secondary and higher education. The returns to primary education for weaker sections (eg. Backward castes and girls) are also found to be sizeable, and in fact, higher than return to their respective counterparts (viz. non-backward castes and girls). Return to upper primary level of education are higher in rural than in urban areas.”⁴ Statistical studies showed that the accumulation of physical capital (the stocks of machines, plants, tools, and so on) explained only a small part of the overall rate of growth of different economies. The notion of human capital (skills and education, embodied in human beings) helped to explain why some economies grew faster than others. For instances, the high rates of growth of South-East Asia economies such as South Korea clearly had something to do with their high levels of investment in human capital, particularly the early expansion of elementary education. The fact that the economic returns of education were high was a valuable insight. According to Jean Dreze, “had there been greater awareness of this fact in the early days of economic planning of India (in the 1950s and 1960s), there would have been more emphasis on elementary education and less on the accumulation of physical capital”.

However, these studies were associated with a rather narrow view of education, seen mainly as an ‘investment’, the main purpose of which was to accelerate economic growth. The wider role of education in enhancing the quality of life was missed in this analysis. The contribution of primary education is not restricted to economic returns only. Its significant effect on improvement in income distribution and poverty reduction, improvement in health and nutritional status of the people are well known. Its negative relationship with fertility and population growth, and positive association with adoption of family planning methods are noticed in various studies. Its positive correlation with general social, political and economic development, and overall quality of life are well organized.

The common minimum programme (CMP) of the United front government at the centre in 1996 was committed to make education a competing goal aiming for the nation to become fully literate by 2005. Some years ago, similar

⁴ . Tilak, Jandhyala B.G., (1999): “Financing Elementary Education: India in the 1990s”, IASSI QUARTERLY, Vol.17, No.3, p.14.

commitment made at New Delhi, talked about Education for all (EFP) by 2000. However, no significant progress in observed even today. Universalization of primary education is the epicenter of structural adjustment policies integrated with a social programme to improve the welfare of the children, women, poor and deprived people. Even today according to census of India, 2/5th of our people are illiterate comprising 25 percent males and 46 percent females. This neglect of girl's education may have cost the children and country very dear, since there are clear-cut evidences, which show that, the total benefits from education multiply when schools are opened to girls and women. In addition to being more productive in market forces, educated women have smaller families; fewer of their children die in infancy; and, the children who survived are healthier and better educated.

There are a number of ways by which education can decrease fertility. It may change perceptions of the costs and benefits of having children, and it also influences the age at marriage and reduces the infant mortality rate. Education may also change attitudes to contraception. In the long run, it is usually the case that increasing education, especially of girls, will ultimately reduce fertility. Schultz (1993) calls the strong link between women's education and fertility 'one of the most important discoveries in research on non-market returns to women's education'. Schultz in his survey said that the women with 7 or more years of schooling have substantially lower fertility than women with zero years of schooling in all parts of the world. Rosenzweig and Schultz (1985) indicated that better educated women have fewer unwanted births. The negative relationship between schooling and realized fertility is not simply due to increased ability to control fertility. However, the data on fertility preferences indicates negative effects of women's education on desired family size in all parts of the world (Schultz, 1993).

There is also a close link between the educational level of the mother and the nutritional status of the child. International and national evidence suggests that the lower level of education of the mother, the higher is the probability of the child being severely malnourished. For instance, for illiterate mothers in Tamil Nadu the percentage of children severely malnourished was 16, while for those with secondary education and above it was 3.4 (IIPS 1995). Better-educated women are more aware of good health practices and the ways to prevent, recognize, and treat illness than are other women. They are more aware of (i) Nutrition; (ii) danger of unsafe water and contaminated food; (iii) Personal hygiene, household and courtyard

sanitation and cleanliness; (iv) health benefits of a more equitable distribution of food in the household; and (v) need for rest during sickness, and the need for speedy treatment of illness and injuries (Jejeebhoy, 1995).

The decline in infant and child mortality is a resultant offshoot of development and is a function of many explanatory variables like income, food and nutritional security, urbanization, private and public expenditure on health etc. However, many studies have come up with the conclusion that mother's education has the most significant role in the mortality decline among young ones. There is enough evidence documenting the strong positive association of the mother's education with child survival in the developing countries (Strauss and Thomas, 1995; Jeejeebhoy, 1995). The effect of father's education also tends to be positive, although generally smaller than that of mother's education (Mensch, 1986). In India, there is a plenty of evidence that female education is much more important than male education in bringing down fertility and mortality rates. For instance, in Kerala, 98 percent of young women (aged 15 to 19) are literates; the infant mortality rate is as low as 14 per 1,000 live births; and the fertility rate is well below the 'replacement level' of two children per couple. In contrast, in a state like Uttar Pradesh, barely half of all young women are literate; the infant mortality is as high as 84 per 1,000 live births; and the fertility rate is close to five children per woman⁵.

In addition to the effects of parental schooling on child health, it is also associated with positive effects on other child outcomes, especially schooling (Strauss and Thomas, 1995). Education also increases the chances of getting various freedoms – freedom from subjugation, freedom from suppression and freedom to exercise various options and to be an active partner in family decision-making. It helps in better development of the personality of the person concerned, and her children by inculcating values like honesty, moral values and character building, sense of confidence, willingness to experiment and show a sense of adventure and drive, scientific outlook and change in attitudes. Education can affect people's lives through several channels. It affects access to knowledge, information and openness to new ideas and experiences, an increasing independence from traditional authority, and a questioning of passivity and fatalism. These effects apply generally to both sexes.

⁵ Dreze, J. and Sen, A. (2002), Statistical Appendix, Table A3. The reference year is 1998.

However, young adult men are exposed to new ideas through their wider contact with the outside world, family and local community, as well as through formal schooling. In contrast, many women in the developing world have few contacts with outside world; for them, formal schooling remains perhaps the primary channel for transmission of new ideas (Jejeebhoy, 1995). Education breaks the shackles of women's confinement to home and creates many opportunities for them to interact with outside world. The evidence for whether educated women face fewer restrictions on physical mobility comes entirely from south Asia and is mixed. In Pakistan, the proportion of women who are free to go to a hospital alone increases from 20 percent among uneducated women to 32 percent among those with primary education and 52 percent among those with more education.

Illiterates are concentrated more in villages than in towns and cities. Besides the scheduled castes and scheduled tribes, the other backward classes too have shown poor performances. The literacy movement at the national and the regional levels therefore requires to be under taken on a war footing in order to achieve sustained economic development in rural India. Elementary education in India is defined as the education from classes I to VIII, and roughly covers children from the age of 6 to 14 years. Elementary education is further divided into two stages: primary and upper primary education. Primary education lasts up to class V and covers children in the age group of 6-11 years. Upper primary covers the classes from standard VI to VIII, and includes children in the age group of 11-14 years. However, while this is the national picture, there are minor variations in some states. Some have primary schooling up to class IV only, while a few have upper primary up to class VII only. However in our study, we have taken elementary education from class I to VIII covering children in the 6-14 age group. Primary education is taken from class I to V and upper primary from class VI to VIII covering children in the age-group 6-11 and 11-14 respectively.

Though contribution of public and private efforts led to the growth of elementary education in India, though it is still not adequate with inadequate budgetary allocation having serious implications for quantity, quality and equality of education. The country's independence has not brought out the much desired change in this respect. There is growing realization that the gains of independence have been somehow, tampered in a systematic manner by not implementing what is planned and

professed in the Constitution, the National Policy resolutions and the five year plan documents.

We are yet to provide effective enrolment facilities in class I to VIII to nearly half of our school going-age population. Given the poor and inadequate basic infrastructural facilities like availability of schools within the habitation, classrooms, teaching aids, and teacher at primary level, the fate of all enrolment drives is easy to guess. The state of physical facilities, classrooms and other infrastructure in government schools, particularly in rural areas and urban slums are poorer. Poor maintenance of state run or aided primary schools on account of paltry or absence of budgetary provision speaks of the nature and extent of concern exhibited by the state for implementing universalisation of elementary education (UEE). The recent craze for admitting children in private managed, so called public schools, and not in the government schools, all over the country is an indicator of the trend of people's confidence in the state managed primary educational institutions.

It would not be unreasonable to say that the various educational facilities, such as schools, colleges and parameters such as investment in education, enrolment ratios, literacy level and levels of educational development are characterized by unequal distribution over states. They are biased in favour of urban areas and areas or states, which are relatively developed. Thereby creating regional disparities. One will have to identify those areas, which have been able to draw greater benefits than others in terms of allocation of educational infrastructure against those, which have been deprived of it. One will also have to look for reasons as to 'why' and 'how' such patterns have developed. 'What' are the ways and means through which balanced development of all parts of India could be attained?

In the country, as a whole, approximately 35 million children (as on 30th September, 2003) still needs to be enrolled. Most recent surveys (NFHS II-1999) indicate that nearly 79 percent of the 6-14 age group is attending school. This means that out of the population of 192 million in the age group of 6-14 in 2000, the number of children attending is 152 million. Those outside the school system are mostly SC/ST girls, working children, children of poor families, disabled children and children in difficult circumstances. Moreover, India being a large country, one sees a wide disparity in the educational status from one region to another. Thus, while there are some regions, which are close to achieving the goals of UEE, there are other regions, which have still a long distance to go before they can achieve the same.

Almost all students i.e. 97 percent are in the 15 major states. Two of these states are doing very well, providing almost all their children with a primary education but several are far behind. Six states account for 25 million of the 35 million primary school age children not in school. Progress in the other states falls somewhere in between. Within states, too, there is diversity- with some districts faring poorly even in states that are otherwise doing well, and vice-versa.

Though the emphasis of any geographical study is on area- the unit of observation, any geographer cannot ignore different segments of population, which live in those areas. Inequality in education is not purely an educational issue; it cuts across the entire social, economic and political fabric of a territory. In the sphere of education, there are glaring caste, gender and spatial disparities as is evident from male-female disparities in rural and urban areas and disadvantaged groups like the scheduled castes and the scheduled tribes. Despite significant strides having taken place in the post-independence era towards provision of education facilities and betterment of enrolment ratio, it is sad that the pattern of educational inequality have remain virtually same or have to led to further deprivation of the under privileged population and the backward regions of the country.

India's goal of universal primary (elementary) education of good quality point to three main challenges: expanding access, raising learning achievement, and reducing gaps in education outcomes across states and among groups. Four actions will be key in meeting these challenges.

- Increasing financing for primary (elementary) education.
- Improving the preparation, motivation, and deployment of teachers.
- Improving the quality of textbooks and the efficiency of their production.
- Building managerial and institutional capacity.

The decentralization of authority and financing-to states today and the districts tomorrow-makes the task of ensuring the required level of funding problematic, the improvement of teaching and textbook easier, and the building of local capacity essential. In all this, the central government's leadership will be more important than ever-in guiding policy, in sponsoring national initiatives, and in transferring resources to the states while devising incentives for states to increase their educational budgets.

1.2 OBJECTIVES

- 1) To measure the spatial patterns of educational development and disparities among states of India and among various social segments inhabiting them.
- 2) To analyse the availability and quality of elementary schools in the different states and union territories of India
- 3) To study the financing of elementary education in India and explore the relationship between investment in education and its performance.
- 4) To study the enrolment and retention in the schools and measures to enhance them.
- 5) To explore and establish relationships among the selected indicators at state level and to study the factors which affect the elementary education in our country.

1.3 DATABASE

Mainly secondary sources of data are used in this study. They are

- (1) Census of India 1981, 1991 and 2001.
- (2) All India educational survey, NCERT, New Delhi i.e. 5th (1986), 6th (1993) and 7th (2002) survey reports.
- (3) Compendium of school statistics (school education), NCERT, 2003, New Delhi.
- (4) Different rounds of national sample survey i.e. 47th (1991), 52nd (1995-96) and 55th (1999-01), Central Statistical Organization, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.
- (5) National Family Health Survey-I (1992-3) and National Family Health Survey-II (1998-9), International Institute of Population Studies, Mumbai.
- (6) Statistical Abstract of India (1993 and 2002), Central Statistical Organization, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.
- (7) Economic Survey of India, i) 1992-93 ii) 2002-03, Economic Division, Ministry of Finance, Government of India, New Delhi

- (8) Analysis of Budgeted Expenditure on Education, i) 1991-92 to 1993-94 ii) 1992-93 to 1994-95, iii) 1996-97 to 1998-99, iv) 2001-02 to 2003-04, Ministry of Human Resource Development, Department of Secondary and Higher education, Planning and Monitoring Unit, Government of India, New Delhi.

1.4 METHODOLOGY

Both qualitative and quantitative works are done in this study. This comprehensive study is factual encompassing all the relevant facts and figures. Composite index, correlation along with other statistical method such as average, coefficient of variance, standard deviations etc are used. Various cartographic techniques such as graphs, choropleth maps etc. are also used to represent the data more meaningfully. Some of the statistical techniques used in this study are

Coefficient of variation = Standard Deviation / Mean

Standard Deviation = $\sqrt{\Sigma (X-\bar{X})^2/n}$

Mean = $\Sigma x/n$

Karl Pearson correlation

Sofer's Index for measuring gender disparity (modified by Kundu)

$\text{Log}(X_2/X_1) + \text{Log}\{(200-X_1)/(200-X_2)\}$, where $X_2 > X_1$.

In ideal case, it should be zero. If it is negative then there is no disparity against X_2 .

Index of social Equity = $\frac{\text{Share of SC\ST enrolment in total enrolment}}{\text{Share of SC\ST population in total population}} * 100$

Gross Enrolment Ratio = $\frac{\text{Total enrolment in class I-V \setminus VI-VIII}}{\text{Population of age group 6-11 \setminus 11-14}} * 100$

Net Enrolment Ratio = $\frac{\text{Total enrolment in class I-V \setminus VI-VIII (in age-group of 6-11 \setminus 11-14)}}{\text{Population of age-group 6-11 \setminus 11-14 years}} * 100$

Retention Rate = $\frac{\text{Enrolment in class V \setminus VIII}}{\text{Enrolment in class I}} * 100$

1.5 SCHEME OF CHAPTERS

The entire study is divided into six chapters according to our convenience. The first chapter is introductory in nature, in which we discuss the problems along with the present conditions of elementary education in India. We also discuss the future goals that we have to achieve. The objectives, database, methodology, chapterisation scheme, study area, literature review etc of the study have also been mentioned in detail.

In the second chapter, the availability of various educational infrastructures in elementary schools in various states has been discussed elaborately. The quality of infrastructural facilities, pupil-teacher ratio etc. has also been studied.

In the third chapter the patterns of school enrolment and retention and their spatial disparity has been discussed. In this chapter gender disparity, community disparity, etc have also been studied. A separate section for retention and dropouts is also being included in this chapter.

In the fourth chapter, spatial pattern of investment in education particularly in primary and elementary education has been studied.

Disparities in the development of elementary education and their correlates have been discussed in fifth chapter while in the last sixth chapter; the summary and conclusions have been presented.

1.6 STUDY AREA

This study pertains to India, where smallest unit of analysis is respective states. So, apart from taking India as a whole, regional disparities across states have also been discussed in detail.

1.7 LITERATURE SURVEY

Literature in a quite significant amount is available on elementary education as well as on primary education. These literatures are related to various aspects of elementary or primary education viz. enrolments, access, financing, educational infrastructure facilities in schools, achievements, etc. In the first half, literature regarding enrolment, access, infrastructural facilities etc. is being discussed, while in second half aspects relating to financing are discussed under broad headings.

Growth of elementary education

Naik, J.P (1975)¹ presents the whole set of issues and problems of primary education in a historical perspective and ends up with a programme of action. He stresses the need to raise the expenditure on elementary education. He said that special efforts should be made to spread elementary education on a non-formal basis and especially among the poorest sections of the society and among girls. He also stresses for development of non-formal programmes of teacher-education in a big way. He also advocated for the autonomy of all educational institutions and making the entire system of elementary education elastic and dynamic.

Venkatasubramaniam K. (1978)² presents a detailed study of the development and limitations of the conventional school system with its problems of “wastage in Primary Education.” He puts the forceful argument that conventional school systems have become a barrier to social development, and again and again he raises key question of what should education be for. In the case study of Tamil Nadu, the author said that the wastage is maximum in the first standard of the primary stage. Wastage is less prominent in higher standards of the primary stage, since it indicates the declining trend from 2nd standard onwards. Along with inter-district analysis (1970-74) of incidence of wastage, the author has also explained the causes of wastage and suggested some practical remedial measures to rectify them. Some of the suggested measures are curriculum reform, individual attention, teacher orientation, efficient administration, etc.

Raza, Moonis and Ahmad, Aijazuddin (1990)³ critically assessed the educational development in India at the school level in conjunction with socio-economic development. The attributes of schooling that have been identified in this study for measuring the efficiency of schooling in India are (i) accessibility, (ii) availability, (iii) quantity, (iv) quality, (v) Inter-connectivity, (vi) equality and (vii) utility.

Mohanty, Jagannath (2002)⁴ discusses the various policies and programmes of primary and elementary education along with role of various national and international organizations in financing the education. He has given in detail the growth and development of primary and elementary education in free India along with the objectives, roles and functions of the same. The author has also presents an in-depth analysis of organization and management of primary education, role and responsibility of teachers, organization of co-curricular activities. The author has also

given a special section on sociological and psychological aspects of primary and elementary education with reference to education of girls, SC, ST, underprivileged, physically handicapped; tribal education, physical growth and development, emotional and social development, language development of children etc

Reddy, V. Ratna and Rao, Nageswara R. (2003)⁵ looks at various aspects of education in an effort to pinpoint the reasons for the poor performance of the sector with special reference to Andhra Pradesh. Though Andhra Pradesh is doing better in school density, size and distribution of habitation, student-teacher rates, etc., declining allocation for education in successive budgets could undermine these gains. The non-formal system has thus far proved to be ineffective and for the state to achieve genuine literacy, it is the formal sector that needs enhanced investment. The intention of the author here is to examine the problems of primary schooling at the district level and also between rural and urban situated in Andhra Pradesh.

Raghavendra, P.S. and Narayana K.S. (2004)⁶ presents an overview of the progress made in the field of elementary education and literacy in India and the problems being encountered offers measures towards universalization of elementary education. The author reviews the institutional, policy and programmes initiated thus far, and shows the persisting rural-urban disparities, gender differential, inter and intra state variations with respect to SCs/STs and general population in the literacy achievements. He argues for free access to elementary education for the socially and economically disadvantaged sections even in the private schools.

The author also calls for more proactive and effective role for the state in realizing universal elementary education. He advocated allocation of at least 6% of GDP in the education sector. He favours penal action against parents not sending children to schools, severe punishment against employers of child workers, introduction of child-centred curriculum, incentives to attract children to schools, inculcation of greater teacher commitment to teaching etc.

Singh, P. Virendra (2004)⁷ attempts to study the major initiatives on the educational development particularly general school education in India. He covers briefly the constitutional provisions, public expenditure on education sector, Government policies and programme, new challenges, quality implications in the wake of new economic policy and other development issues to provide access to school education of satisfactory quality in the country. The present study provides the

future dimensions to the educational policies and programmes in school education for initiating necessary interventions.

Programme and policies

Shipra, Vaidya (2001)⁸ studies the reforms and development of education in India. It entails all the committees and commissions set up by Ministry of Education at regular interval for the promotion of all sector of education. Apart from this, she discusses the educational scenario in some selected states of India. Finally, the book presents the practices followed by the respective state governments in the hope of creating the most desirable environment of education.

Aggarwal, J.C. (2001)⁹ talks about the National Policy on Education 1986 and its review in 1992 when some modifications were made into it. Here author attempted to provide a detail account of the efforts made in the implementation of the NPE. While discussing the various dimensions of the NPE, special attention is given to the restructuring of the curriculum. In this context, salient features of National Curriculum framework for school education 2000 and National Curriculum framework 2005 are presented. A special section on the education of the scheduled castes, scheduled tribes and other backward classes are given. In the context of major initiatives taken for the implementation of Revised National Policy on Education 1992, the author has described a large number of programmes undertaken by government of India during different time period, along with its objectives, funding, coverage, monitoring and its evaluation.

Ramachandran, Vimala (2001)¹⁰ focuses on two important initiatives in Rajasthan namely Shiksha karmi and Lok Jumbish Project. She also draws upon the experience of women's development programme (WDP) of Rajasthan-which was a learning ground for many people involved in conceptualization, designing and implementing the above educational projects. However, sustainability of these programmes remains a perennial problem as several of these projects have been entangled in bureaucratic and political battles. Only a few like Shiksha Karmi manage to survive.

Govinda, R. (ed.2002)¹¹ presents a collection of twenty three abridged and edited version of chapters originally written for the Dakar Conference covering different aspects of Indian experience of the programme of education for all. The introductory chapter by the editor presents an overview of all the other chapters

highlighting the perspective of the EFA programme in India as well as bringing into focus some urgent questions regarding the same.

Society and women

Nambissan, Geetha B. (1995)¹² says social process within the family and schools have implications for the education of girls. Cultural norms and expectations regarding women's role, and hence gender socialization within the family results in differential acquisition of abilities and aptitude among boys and girls. Among the poor, the burden of work compounded by poverty as well as the nature of employment opportunities available to poor women are likely to be important reasons as to why girls are not sent to school. Research evidence in classroom process suggests that teacher attitudes and pedagogic practices play a crucial role in reinforcing gender inequity in education.

Ghosh, P.K. (1998)¹³ discusses that the Union and state governments after independence adopted policies and programmes of education, which led to enough progress in the field of education. In this rising trend various states and population groups have unequal results. Within the states, different population groups have unequal share in this progress. Communities like scheduled castes and tribes are still lagging behind others in many states despite special facilities and protective discrimination in favour of them. The author enthusiastically says that after five decades of planning and in the context of liberalization and structural adjustment, it may be of interest to make a comparative assessment of the progress made by SCs and STs vis-à-vis others in different states.

Ramachandran, Vimla and Saihjee, Arti (2002)¹⁴ attempts to capture the impact of primary education programmes on the ground based on a desk review of the District Primary Education Programme (DPEP) and quantitative micro-studies in six states. Introducing the emergent concept of 'hierarchies of access' to describe the new segregation occurring in primary education, the author focuses on the micro-studies documenting the dimensions of gender and social equity that frame the implementation of DPEP at the village and panchayat level. On the basis of the findings of the desk review and the micro studies, the author discusses ways to reverse the trend of segregation so as to make universal primary education a substantive reality.

Bhat, R.L. and Sharma, Namita (2005)¹⁵ try to assess and analyse the various external economies of women's education with particular reference to developing countries. The authors say that the evidence from most of the developing countries of Asia, Africa and Latin America highlighted the role of women's education in improving their status, autonomy and the role in decision-making at the household level. It also led to reducing their fertility, improvement in the health of their children reflected by certain quantitative indicators like infant and child mortality, the health status of their family, the changes in their behaviour, responses and attitude, and their physical and social mobility. Although these gains may not be exclusively due to the education of women, there are a host of other explanatory variables, yet the education of women contributes to these gains as independent variables.

Velaskar, Padma (2005)¹⁶ examines the extent to which dalit women have been able to cut across barriers of caste, class, and gender to gain access to schooling in Maharashtra state. The paper begins with a brief history of dalit women's education in the colonial context, and of modern educational development among Maharashtra's dalit and women only in broad form. The second section of the paper is an attempt to understand the main trends in dalit women's educational trajectory and chronicle pattern of caste and gender inequality in the post-colonial period. It conducts a comparative analysis of educational progress of dalit girls with that of dalit boys and non-dalit girls, ascertaining patterns of enrolment, dropout and attendance at school. It also attempts to examine temporal change in levels of disparity. The third and final part of the paper reflects on the character of educational advances that is revealed in the earlier section.

Infrastructure and access

Varghese, N.V. (1995)¹⁷ attempts to develop a methodology to empirically analyze and categorise primary schools in India in terms of infrastructural facilities. The most critical variables based on which to categorise and classify primary schools have been identified through a process of statistical analysis of a number of school factors. This exercise is meant to help contextualise school quality in order to develop intervention strategies for school improvement.

Pal, S.P. and Pant D.K. (1995)¹⁸ attempted to identify the determinants of access to education and to explain the inter-state variation in the enrolment rate of

the primary school age children. The author says that there is no single factor that could explain this variation. A large number of factors that affect the supply and demand for education and their interaction determine the access to school education. Along with availability and quality of school facilities, poverty, illiteracy and higher private cost of education are, however, important factors that constrain access to education. This is true of both rural and urban areas. Based on these relative importances of these factors, a strategy to improve access to education is also being outlined in the article.

United Nation (1996)¹⁹ in this report “India Primary Education – Achievement and challenges” talked about the achievements of primary education in India and the challenges to be meet in the future. The report pinpoints that India’s goal of universal primary education of good quality points to three main challenges: expanding access, raising learning achievement, and reducing gaps in education outcomes across states and among groups.

Sinha, Amarjeet (1998)²⁰ talks about the state of primary education in India. He also talks about the interrelationship between poverty, child labour and primary education. The author argued for the community’s role in education, improving teacher’s motivation, competence, accountability and innovation; ensuring ‘social access’ to common school for disadvantaged social groups, ensuring ‘cultural access’ to tribal children. He also talked about improving participation of girls, providing co-curricular opportunities that bring about total development of children, improving school facilities that enhance school effectiveness, improving health and nutritional status of pre-scholars, developing activity based and child-centered curriculum that promotes learning by doing etc.

Malgavkar, P.D. (1999)²¹ says that for education to become the foundation of socio-economic development, at least four to five years of education is essential. The author says that whilst the necessity of improving the schools and their environment, the teaching material, the methodology and teacher development has to be a continuous process, the main trust has to ensure that every children, especially the female children attends schools and there is no dropout till at least five years of education is completed. P.D. Malgavkar’s study stresses the goal of achieving five year of education for all.

Ramachandran, Vimla (2003)²² discusses a plethora of factors on which active participation of children in primary education depends. The author says besides access, a range of demand and supply issues influence why children choose to attend school regularly. Thus far policy-makers and education administrators have focused mainly on the formal school system and on improving access to education. The creation of 'backward and forward' linkages is essential for creating an environment where every child not only goes to schools but benefit from it.

Iyenger, Radhika (2004)²³ says a child's interest in learning is often hampered by the absence of infrastructure and good teachers. These impressions recorded following a 'demonstration' in a hamlet school. It also reveals the progress made in child learning abilities after new more sensitive approaches were adopted. But to sustain a child's interest requires a more conjoined effort- on the parts of parents, teachers and even the government.

Enrolment and dropout

Mehta, Arun C. (1995)²⁴ presented an indepth analysis of status of education for all in general and universalisation of elementary education in particular. By taking the real life data, the author has critically examined the status of demographic and educational scenario in the country. The author while examining the enrolment sources highlights the discrepancies in official estimates and those collected by the quasi-official agency. He also studies pattern of over age and under-age children in different age- groups and computes refined enrolment ratios. Further, the author examines and revises Eighth Five-year plan targets of additional population need to be involved. He also works out number of years and corresponding calendar year a state or union territory would table to achieve goal of universalisation of elementary education and to attain universal literacy status. In the last, he discusses a variety of measures of internal efficiency of education system.

Jaganathan, N and Manoharan, P.K. (1997)²⁵ pinpoint the declining level of wastage in absolute percentage terms along with increasing levels of education for boys and girls of non-scheduled caste or tribe and scheduled caste or tribe in all regions of India both in 1980-81 and 1990-91. The authors say that this fall in wastage may be due to the fact that most of these schools were single teacher schools, and as such the teachers concerned might have had a tendency to inflate the pass percentage of students for their personal benefits. Further, the education policy of

universalisation of education and increasing literacy and awareness in parents might have reduced the wastage at the primary school level in all regions of India.

Sharma, Rashmi (1998)²⁶ tries to highlight two issues. First, despite four years of schooling, studies show that an alarmingly large number of children do not become literate. The author argued that therefore, school effectiveness and actual learning have to be central rather than secondary concerns for universal elementary education. Secondly, the author says that effective schools and success in learning depend not only on school level inputs but also on factors outside the school. Creation of rural infrastructure and measures to reduce the worst effects of poverty on children are necessary for education to become empowering and effective.

Dwarakanath, H.D. (2002)²⁷ talks about the sad progress of primary education in rural India. He said the majority of the illiterate population are concentrated more in villages than in town and cities. Besides the scheduled castes and tribes, the other backward classes too have them in large number. He also studies the large-scale dropouts in the country and gives conclusion that acute poverty, economic inequalities and disinterest form the basic reasons for dropping out of the children. The author also discusses the various measures through policies and programmes to improve school education in rural India.

Ramachandran, Vimla (2004)²⁸ shows that despite improvement in the availability and distribution of elementary education in recent years, vast sections such as the poor girls in rural areas, tribals and some among scheduled castes remain out of its reach. There is need to review centrally assisted programmes to ensure that region and content-specific issues are highlighted, more particularly that such schemes are tailored to meet the varying needs of a vast and complex country. Regarding backward states, the author says they need continuous resource support. In another article, the author says increase in enrolments rates, attendance figures and midday meal distribution do not convey the true picture of the state of education system in country. Equally disturbing is the high dropout rate from primary to upper primary levels. She put the blame partly upon educators specially teachers who in government schools and in more rural areas appear demotivated and disheartened.

Singh, Shashi Bushan (2004)²⁹ talks about the shortcoming of the midday meals programme in schools but ultimately have come to the conclusion that with adequate resources and quality safeguards, mid-day meal can play a major role in improving school attendance, eliminating classroom hunger and fostering social

equality. However the author has raised two questions about mid-day meal. First is that in a country where education sector is facing a scarcity of resources, which is the right place where resources should be utilized? Secondly, by allocating a total different role to an institution other than for which it has been created, how it will affect the well being of that institution?

Ramachandran, Vimala (2005)³⁰ says that increase in enrolment rates, attendance figures and midday meal distribution do not convey the true picture of the state of the education system in our country. She further says that equally disturbing is the high dropout rate from primary to upper primary level. She partly puts the blame on educators, especially teachers who in government schools and in more rural areas appear demotivated and disheartened.

Mehrotra, Panchamukhi, Srivastava R. and Srivastava R. (2005)³¹ examines the state of elementary education in seven of India's most educationally backward states-Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal and in one of India's relative star performer in elementary education, Tamil Nadu. These states account for over three- fourths of the children out of school. The writers also examine the public expenditure pattern on education in those states, the private sector and household spending on schooling. They also estimate the cost of achieving universal elementary education in these states.

Financing of education

Prabhu, K. Seeta (1995)³² presents a few preliminary trends observed in educational expenditures, incurred both at the union government and state government levels since mid- 1991 when India has embarked on an structural adjustment programme. The author's analysis reveals the share of education in total revenue expenditure has actually undergone a marginal decline between 1990-91 and 1994-95. In case of state government expenditure, there was a general decline in real per capita expenditures on social sector and education in many states. The intra-sectoral allocations for select states also did not reveal any substantial reallocation in favour of elementary education.

Reddy, K.N (1995)³³ analyses the pattern of financing primary education that includes pre- primary, primary and middle school education in India by governments at the national and state levels during 1974-75 to 1986-87. The author says although primary education was given top priority, over a period of time its share

at the national level as well as at the states level declined. The states like Punjab, Haryana, West Bengal, Andhra Pradesh, Karnataka, Orissa, Madhya Pradesh, Maharashtra and Gujarat, accorded relatively low priority to primary education inspite of their relatively higher fiscal capacity and lower level of literacy. On the other hand, in spite of allocating higher percentage of resources to primary education, the literacy level in Bihar, UP, Rajasthan did not pick up much because of inefficiency in the utilization of resources. Nearly one-fifth of the state resources are spent on education. But author has raised the question 'what should be the optimum share for elementary education' that has to be addressed earnestly a consensus reached for policy purposes.

Nautiyal, K.C. (1995)³⁴ talks about our shamefulness in not providing universal basic education in terms of quantity, quality and equality. The author provides some crude facts in respect of four basic parameters of universal education (UPE) i.e. (1) Universal access (b) universal enrolments (c) universal retention and (d) universal achievement vis-à-vis public expenditure in primary education based on the recent surveys and the official statistics.

Majumdar, Tapas (1998)³⁵ briefly present the report of the expert group appointed by the Ministry of Human Resources Development for examining the cost of elementary education for all.

Tilak, Jandhyala B.G. (1999)³⁶ attempted to examine, only one particular aspect viz., the pattern of financing of elementary education in India in the 1990's i.e. after the Jomtien Conference. The author says though the public expenditure on education, and also as a proportion of the government budgets showed an increase in the 1990s, public expenditure on education as a proportion of national income has declined steeply from above four percent to much below 4 percent in 1990's. Government expenditure on elementary education as a proportion of national income also declined from 1.6 percent in 1990-91 to 1.4 percent in 1996-97. Quick calculations also reveal that real expenditure per student has declined over the year in the current decade. The author estimated that realization of the long cherished goal of universalisation of elementary education requires additionally Rs 1,37,000 crores in the next ten years-about Rs 14,000 crores a year or on average about 0.7 percent of national income per annum. This doesn't seem to be an unachievable task, nor is it unaffordable.



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Pandey, Saroj (2002)³⁷ analyses the issues and challenges, both human and financial, in the context of making education as a fundamental right of the child. Apart from it, the author also discusses other compulsory education laws in the post-independent India. The Majumdar Committee Report (1999) estimated that an additional amount of Rs.13, 682 crores would be required to achieve universalization of elementary education (UEE) by the year 2007-08, which will put enormous financial burden on the state exchequer. It may be overcome to some extent through utilization of cost-effective strategies, optional deployment of existing resources, and mobilization of funds from additional sources.

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CHAPTER TWO

EDUCATIONAL INFRASTRUCTURE IN INDIA

2.1 INTRODUCTION

According to Census of India 2001, the population of our country has crossed the one billion mark. It was 1027 million on 1st march 2001. This second most populous country after China has witnessed unusual educational development both in quantitative and qualitative terms, since independence. However, the national goals of universal elementary education and total eradication of illiteracy have still remained elusive.

The poor performances in attaining higher literacy rates could be viewed from the supply as well as demand side. The supply side aspects include availability of schools in the vicinity, facilities in the school, teacher quality, quality of education, etc. On the demand side the problems are high opportunity cost, high cost of education, low returns of education etc. Since primary education has been made a fundamental right, the stress is often on the supply side factors though demand factors also play an important role. Moreover, the demand side factors are directly linked with economic development provided a threshold level of development has been achieved with reasonable equity across regions and socio-economic groups. The ranking of states by literacy rates and economic development clearly indicates that development does not guarantee literacy automatically, which is true even across countries (UNDP 1990). This emphasizes the role of supply side aspects in improving the literacy levels. This is more so in the case of backward and rural areas due to the very unfair distribution of gains between less-endowed and well-endowed regions and between rural and urban areas. Here we focus our analysis on supply side aspects, as it is more important in developing countries like India.

Availability of schools, physical accesses to school is important dimensions in terms of both supply and demand factors. Access is often defined as availability of schools to all school-going children within a distance of 1 kilometer. Of late, location of the school is also considered important in defining access. It is observed that children from lower social groups are not comfortable going to school located in the higher social group region and vice versa (Aruna 1999, PROBE 1999). In this section we deal with aspects of access at state level in the country.

2.2 EDUCATIONAL PLANNING IN INDIA

At the time when planning process was initiated in independent India, the country faced a huge inheritance of the colonial education system. Mass education, comprising of universal primary and upper primary education and adult education was never a priority in the colonial educational policy, nor was of course higher education. Educational policy in India was clearly subservient to imperial economic policy. The Britishers only wanted to produce some limited quantity of university graduates, who can do their low paid clerical job. The education was only accessible to the elite class of society. The high-ranking government jobs are either reserved for Britishers or it was very difficult for Indians to compete for it. They are not interested in making provisions of elementary education for general masses. The colonial dependent economic relationship between Britain and India shaped the educational policies in British India. As a result, India had to start, after independence almost at scratch but has made significant progress during the post independence period. The government of India recognized the pivotal role of education in development. The constitution of independent India has resolved to provide elementary education free to everyone. It stated:

“The state shall endeavour to provide, within a period of ten years from the commencement of their constitution for free and compulsory education for all children until they complete the age of fourteen years (Article 45).”

The government has accorded special importance to education not only in the country's constitution but also in the five years plans. From the very first five-year plan onwards, the attempt was to make education an integral part of economic planning. Plan after plan incorporated a chapter each on education and sciences and technology, and highlighted their relationship with economic development. It was however, the education (Kothari) Commission (1966) that stressed the relationship between education and productivity and the critical role of education in national development clearly.

“Education as an investment in human resources plays an important role among the factors which contribute to economic growth”. (Kothari Commission, 1966)

The fifth five-year plan recognized education as a key factor in production (p.191). Elementary education was made an important component of National Minimum Needs Programme of the plan. The 42nd amendment to the

constitution in 1976 brought education, which is largely a state responsibility, into the concurrent list, making it a responsibility of both the union and state governments. The 73rd and 74th amendment to the constitution placed a greater role on local bodies for the development of education, among others. Elementary education has been made a fundamental right with the 86th amendment to the constitution in 2002.

The several policy statements (for example, National Policy on Education 1968 and 1986 and revised 1995) laid special emphasis on the role of education as an important means of development, viewing education as a crucial area of investment for national development and survival (Government of India 1986). Both national policies stress on the promotion of education specifically, the need for eradicating illiteracy altogether, and to provide universal elementary education to all in the shortest possible time. They also laid special emphasis on vocational and technical education at the secondary level and on improvement in quality and relevance in higher education. Equity in education by gender, caste and socio-economic groups, and reduction in regional disparities in educational development have been the major objective of educational planning in India.

Enrolments in all educational institutions have increased eight times from about 2.4 crores in 1950-51 to above 21 crores in 2002-03, as per the official statistics. The census of students in educational institutions in India outnumbered to total population of United Germany, England, and Canada taken together. Thus the education system in India is the second largest in the world, with 10.4 lakhs schools and about 17,000 colleges, and about 329 universities, including institutions deemed to be universities. Schooling facilities at primary level are accessible to the population living in 83 percent of the habitation within a distance of 1 km according to the draft of tenth five-year plan.

Independence has created an unquenching thirst for knowledge resulting in an abnormal rise in the social demand for education. Public policy towards equality in education led to the expansion of educational horizontally. The rise in the individual earnings created further growth in demand for education. There has been a very significant improvement in education with respect to inter regional inequalities, and inequalities by gender, caste religion etc. during the post independence period. The expansion of education since the independence period has made a significant contribution to the economic growth. Both social and private rates of return to education are estimated to be reasonably high, compared to the alternative rates of

return (Tilak 1987). The economic returns of education in India are found to be fairly high; they are comparable to rates of return to investment in physical capital on one hand, and on other hand, to rates of return of education in other developing and developed countries of world. The effect of education on agricultural development was also found to be quite high. But despite the expansion of the system, the progress achieved has not been satisfactory, both in terms of quantity and quality. A general feeling is that 'education in India is in peril'. Amartya Sen (1970) warned about the 'crisis in Indian education'. India inherited an irrelevant educational system from British rule. That is, the Indian educational system faced a crisis even before attaining maturity and the crisis became an integral part of the system. After all, education has been under the control of the Indian rulers not just since 1947, but since 1921.

2.3 EDUCATIONAL INFRASTRUCTURES IN INDIA

Educational infrastructure like schools with permanent buildings, appropriate numbers of teachers, adequate stationary facilities, provisions of drinking water and toilets, other ancillary facilities etc., are needed for proper functioning of schools and imparting education to students. Moreover, these facilities are minimum necessities needed for school education and also to enhance the interests of children in schools. Heyneman argues that "at the minimum a school is acceptable if it can provide a place for students to work without the danger of roof collapsing, if neither wind nor rain sends students into a corner for protection, if there is place for each to sit down, a place to write, material to write with and a certain minimal number of maps, charts and reference books from which to derive information".¹ Broadly we can divide educational infrastructure into two categories – 1) physical and 2) Instructional infrastructure. Physical infrastructures are like availability of schools, availability of schools buildings and rooms, availability of ancillary facilities etc. Instructional facilities include availability of teachers, supply of teaching-learning materials etc. After independence the Union governments along with state governments undertook the task of construction of school educational infrastructure through a powerful apparatus of planning. Educational expansion during 1951-81 took place in the context of a low level economic development and a high social demand for formal education as an avenue to social mobility. However, with sluggish economic growth

¹ Heyneman, S.P. (1980): *Evaluation of Human Capital in Malawi*, The World Bank, Washington D.C.

since seventies, the states constrained to pursue rapid expansion of education system in India. In purely quantitative terms, the national elementary educational system during the first five decades since India's independence has expanded into one of the largest in the world. (9th Five-Year Plan Document).

2.3.1 Growth in number of Primary and Upper-Primary Schools

Beginning from small base of about 2,00,000 institutions, the country at present supports nearly 8,00,000 primary and upper-primary institutions. In the year 1950-51, there was only 2,09,671 primary schools, which increase to 6,64,041 in 2001-02 and that of upper-primary schools, increased from 13,596 to 2,19,625 respectively in response to the increase in schooling going population. During this period the number of primary schools increased by 3 times, while the upper primary schools increased by 16 times.

The upper primary institution have grown at much faster rates than the primary ones, but this expansion remain inadequate, as is reflected in the proportion of upper primary to primary schools. A high proportion of primary to upper primary schools reflects a low access to upper primary school for those who complete primary school. All states except, Rajasthan, Gujarat, Karnataka, Maharashtra and Mizoram are considerably below the ratio of 1:2 (2 primary schools for 1 upper primary school) in 2002, the target to be achieved by the end of the eight-five year plan. The ratio is the worst in West Bengal (1:25), where the number of upper-primary schools has declined considerably over the past two decades. In West Bengal on an average there is one upper-primary school available for 25 primary schools in 2002, imposing a natural limit to the educational development of the few who complete the primary stage. A possible reason for the neglect of the upper-primary stage in west Bengal is its structural linkage with the department of secondary education, which is detrimental to the case of elementary education. In the remaining states, one upper-primary school is available for about 2-6 primary schools, and the proportion itself is high considering the long distance involved in reaching schools. In addition, there is inter-district variation. In Rajasthan, for instance there are 16 districts located mostly in the desert and tribal areas where this ratio is much higher than the state average of 1:1.42 upper-primary schools for primary schools. Such a situation imposes a natural limit to the expansion of the educational status of the eligible population.

Moreover, enrolment growth has far exceeded the growth in educational institutions and the number of teachers in the various states. This clearly indicates the inability of the system to expand in space with growth demand.

The total upper primary school in India was about 1,37,687 in 1986, which increased to 2,45,274 in 2002 at the rate of 4.88 percent per year. The ratio of upper primary school to primary one also decreased from 1:3.8 to 1:2.65, which shows more availability of upper primary schools to children who has passed out primary school stage. This shown that greater stress was given to expansion of elementary education by government of India during the post-reform period.

The tempo of growth of urban upper primary schools in India is greater than that of rural upper-primary schools during 1986-2002. So, this clearly shows our urban bias in the provision of availability of upper primary schools in country. This is happening from the last two decades. This situation might be because of greater demand of education in urban areas than rural areas. The ratio of upper primary school to primary school is also lower in urban areas than rural areas. In 2002, the ratio of upper primary to primary in urban areas is 1:1.52 while that in rural areas is 1:3. So, ratio is twice better in urban areas than rural areas. One better picture, which is emerging from the data that, this ratio is improving both in rural and urban areas over period of time.

In rural areas, upper primary education is also expanding but its pace in slower than urban one. The ratio of upper primary-to-primary school has improved over the period and it is 1:3 in 2002, which is not better than urban areas.

2.3.2 Number of Schools According to Management

There are essentially four type of school in India

1. Government-schools, including those run by local bodies,
2. Private schools, aided by the government,
3. Private unaided schools; and
4. Unrecognized private schools (the first three being recognized by the government).

Government schools are wholly financed by states (that is provincial) governments. They have a uniform curriculum; school hours, textbooks and time table. Teachers are hired and allotted to individual schools by the department of education of the state, and follow set specification in respect of educational qualification and

training. All government schools receive the same set of educational aids. Teacher's salaries are established by the states separately, but most follow central government guidelines for both scale and increments.

Government aided schools in the private sector finance the initial and on-going capital costs, but are given government funds to cover the salaries of all teachers and recurrent spending on non-teacher inputs. In all other respect they are similar to government schools, following the same curriculum, syllabus textbooks and eligibility criteria for teacher recruitment. The big difference is that the decision to have teachers lie with the management, which can also finance additional teacher posts and other recurrent expenditure from their own funds. (A government representative sits on the recruitment committee of private schools). Teachers in government and aided schools are part of the civil service and salary scales are linked to the civil service pay structure.

Unaided schools are entirely self-financing. They can select among any of the recognized syllabus, hire and fire teachers, set salary scales, decides on fees, select textbooks, and determine their composition of expenditures and the mix of inputs. The government regulation, only to ensure the prescribed standard of physical infrastructure and initial endowments are being adhered to, through annual inspections, regulations that are not often enforced.

Unrecognized schools may often not even be regulated by the government and, therefore face no requirement or regulation whatsoever. They are required to be registered. Addition they should meet certain minimum standard in order to be recognized by the government. In many cases, the state government may not even be aware of there existence. It is the recognized unaided schools and the unrecognized ones that can be referred to as purely private schools.

2.3.2.1 Primary Schools

In 1973-74, government primary schools were 51 percent of the total primary school in India. In 1978-79, 1986-87 and 1993-94 a large percentage of primary schools were under local bodies but the trend again shifted in 1996-97 and 2001-02, in which the percentage of government primary schools was higher than local bodies. Government and local bodies put together continued to own more than 90% of primary schools. So, government agencies are the single largest provider of primary education in our country. The contribution of private agencies has been small

though increasing over the years and was highest in the year 2000-02, 9.08 percent. The percentage of primary aided schools has been slowly decreasing over the year and that of the percentage of unaided schools has been increasing.

TABLE 2.1
PERCENTAGE OF PRIMARY SCHOOLS UNDER DIFFERENT
MANAGEMENT 1993

State\UTs	Govt.	Local Body	Govt.+LB	Private Aided	Private unaided
Andhra Pradesh	7.09	85.82	92.91	4.06	3.09
Andaman & Nicobar	96.27	0	96.27	0	0.03
Arunachal Pd.	97.38	0.08	97.46	1.13	1.39
Assam	94.28	4.33	98.61	0.21	1.16
Bihar	99.31	0.04	99.35	0.59	0.05
Chandigarh	61.9	0	61.9	0	0.03
D and N Haveli	92	0	92	7.2	0.8
Daman and Diu	96.66	0	96.66	0	0.33
Delhi	0.1	89.32	89.42	2.54	8.02
Goa	94.45	0	94.45	4.08	1.45
Gujarat	0.32	94.68	95	1.34	3.64
Haryana	97.88	0.11	97.99	0.8	1.19
Himachal Pradesh	97.38	0.11	97.49	0.51	1.98
Jammu & Kashmir	98.29	0	98.29	0.27	1.42
Karnataka	94.74	0.15	94.89	1.66	3.43
Kerala	38.43	1.2	39.63	58.35	1.99
Lakshadweep	100	0	100	0	0
Madhya Pradesh	89.75	2.26	92.01	1.54	6.43
Maharashtra	0.8	90.64	91.44	4.48	4.04
Manipur	70.7	0	70.7	14.18	15.11
Meghalaya	4.34	67.89	72.23	20.73	7.02
Mizoram	85.79	0.84	86.63	10.18	3.18
Nagaland	95.42	1.3	96.72	1.79	1.46
Orissa	92.45	6.5	98.95	0.75	0.29
Pondicherry	78.2	0	78.2	0.89	20.89
Punjab	97.86	0.25	98.11	0.51	1.35
Rajasthan	8.89	83.29	92.18	0.96	6.89
Sikkim	99.61	0	99.61	0.39	0
Tamil Nadu	6.16	77.37	83.53	16.11	0.33
Tripura	41.25	57.91	99.16	0.64	0.19
Uttar Pradesh	0.06	87.04	87.1	1.46	11.42
West Bengal	5.48	86.52	92	7.95	0.03
INDIA	44.63	47.47	92.1	3.77	4.11

Source: Calculated from Sixth (1993) All India Educational Survey, NCERT.

According to sixth all India educational survey 1993, about 92 percent of primary schools are in the domain of state governments and only 8 percent are in the private sector. So, state governments are the main and largest provider of primary education to general masses of people. Also in majority of states and union territories, more than 92 percent of primary schools are in public sector except Kerala (40%), Manipur (70.70%), Meghalaya (72%), Mizoram (87%), Tamil Nadu (83.5%), UP (87%), Chandigarh (62%), Delhi (89%), and Pondicherry (79%). In these states and union territories, the share of private sector in total primary schools is greater than other states and UTs.

The concentration of private schooling in a few states is a paradoxical phenomenon that appears to be responding to private demand deriving from high levels of disposable income, and the poor state of schooling offered by the public schools system. Interestingly, in Kerala where there is large high expenditure on social sectors, also have high percentage of primary education in private sector. Because there government gives aid to large number of private schools as evident from large number of private aided schools.

2.3.2.2 Upper primary School

Government continued to manage a majority of upper-primary schools. The percentage of such schools managed by government ranges from 40 percent to 51 percent in the year 1973-74 to 2001-02. Government and local bodies schools put together accounted for 75.12 percent to 79.45 percent of schools, the private sector (aid and unaided) had a percentage share of 21 percent to 25 percent over the years.

The private aided upper-primary schools have been decreasing over the years. It had come down from 17.75 percent in 1973-74 to 7.8 percent in 2001-02. On the other hand, the share of private un-aided upper primary schools had gone up from 4.67 percent to 15.77 percent during the same period.

In majority of states and union territories about 80 percent and more of upper primary schools are ran by state governments as illustrated by 6th all India Educational survey. But there is other also where government owned schools are less than 80 percent. They are Kerala (33.5%), Madhya Pradesh (77%), Tamil Nadu (66.4%), UP (57.13%), West Bengal (25.98%) Chandigarh (48.26%) Delhi (42%) and Pondicherry (69.2%).

TABLE 2.2

**PERCENTAGE OF UPPER PRIMARY SCHOOLS UNDER DIFFERENT
MANAGEMENT 1993**

State\UTs	Govt.	Local Body	Govt.+LB	Private Aided	Private Unaided
Andhra Pd.	5.72	74.18	79.9	6.91	13.17
A & N Islands	97.72	0	97.72	2.28	0
Arunachal Pd.	96.02	0.36	96.38	2.16	1.44
Assam	92.72	3.06	95.78	3.35	0.84
Bihar	97.5	0.19	97.69	1.8	0.48
Chandigarh	44.82	3.44	48.26	0	51.72
D and N Haveli	88.09	0	88.09	9.52	2.38
Daman & Diu	100	0	100	0	0
Delhi	39.13	3.16	42.29	5.73	51.97
Goa	82.2	0	82.2	16.1	1.69
Gujarat	0.44	85.96	86.4	5.14	8.45
Haryana	80.79	1.08	81.87	1.41	16.7
Himachal Pd.	91.06	0.01	91.07	2.52	6.22
Jammu & Kashmir	90.32	0	90.32	0.86	8.81
Karnataka	80.17	0.34	80.51	10.23	9.24
Kerala	32.72	0.75	33.47	64.49	2.02
Lakshadweep	100	0	100	0	0
Madhya Pd.	75.55	1.68	77.23	2.6	20.14
Maharashtra	1.72	89.74	91.46	5.87	2.69
Manipur	43.58	0	43.58	13.34	43.01
Meghalaya	7.56	0	7.56	81.95	10.48
Mizoram	52.46	2.13	54.59	36.01	9.37
Nagaland	70.9	5.19	76.09	12.46	11.42
Orissa	89.96	1.97	91.93	5	3.06
Pondicherry	78.2	0	78.2	0.89	20.89
Punjab	92.4	0.07	92.47	1.89	5.62
Rajasthan	80.2	0.77	80.97	2.65	16.3
Sikkim	100	0	100	0	0
Tamil Nadu	5.95	60.46	66.41	32.6	0.98
Tripura	97.69	0.92	98.61	1.15	0.23
Uttar Pradesh	1.4	55.73	57.13	9.5	33.35
West Bengal	4.33	21.65	25.98	73.37	0.24
INDIA	44.63	47.47	92.1	3.77	4.11

Source: Calculated from Sixth (1993) All India Educational Survey, NCERT.

Accordingly in these states and union territories the percentage of private schools is high. But in Kerala (64.5%), Meghalaya (82%), Tamil Nadu (32.6%), West Bengal (73.37%), the government aided private upper school are much higher. In Manipur (43%), Rajasthan (16.3%), Madhya Pradesh (20%), Uttar Pradesh (33.4%), Chandigarh (51.8%), Delhi (52.%), and Pondicherry (25%), the share of

private unaided upper primary schools is also high in respect to others. Since Chandigarh, Delhi and Pondicherry are an urban centre that's why private unaided upper-primary schools are in large percentage. Because of failure of state government in providing an efficient equality education, the percentage of unaided private schools is also so high in UP, MP, Rajasthan and Manipur. In Manipur, the percentage of missionary schools is also high enough.

2.3.3 Availability of Educational Institution in Rural Areas

Distance from school is one of the factors that effect access to education apart from quality of school, facilities, gender, poverty, socio-cultural values etc. It is a critical factor in determining whether or not children, especially girls, attend school. The urban-rural disparity in enrolment of children can be explained, to a large context by distance from schools. In Nepal, for example, for every kilometer that a child walks to school, the attendance rate drops by 2.5 percent (CERID, 1984), Robinson (1984) observed a high positive association between non-enrolment and distance. In India, the correlation between school within habitation and enrolment in rural areas is 0.52.

So, availability of educational institutions at appropriate distance is necessary so that children could have easy access to it spending less time, energy and finance.

2.3.3.1 Availability of Primary Schools

According to sixth all India Educational survey, about 78 percent of the rural population has a primary school within habitation and 94 percent has within the range of 1km from the habitation including those primary schools that are within habitation. However, the expansion of primary schools facilities in rural areas is inadequate, keeping in view the commitment of the states to the goals of UEE. A comparison of the finding of the Sixth AIES with those of the fifth AIES (1986) reveals important clues about the expansion pattern of elementary schooling. The gain of few percentage points in the expansion of primary schooling facilities for the country as a whole is only marginal in nature and is in no way reflects a committed approach towards achieving UEE goals.

(a) Primary Schools

If we compare the figure of sixth all India educational survey with those of fifth and fourth one, the availability of primary schools in India are either constant or have been deteriorated. The percentage of rural population having primary school within habitation has gone up from 78 percent to 80 percent from 1978 to 1986. But after that it again decreased to 78 percent in 1993. And figure for primary school within 1km of habitation remain hovering around 94 percent. So, no real development in terms of availability of primary schools happened during the period of 1978-1993. Still about 6 percent of rural population does not have primary school within 1 km of their habitation.

In some selected states and union territories, the proportion of rural population served by primary schools within habitation has declined over the previous survey in 1993. Some of them are Assam (16%), Bihar (2%), Chandigarh (7%), Dadra and Nagar Haveli (11%), Daman & Diu (5%), Delhi (16%), Kerala (11%), Manipur (8%), Meghalaya (7%), Skims (8%), Rajasthan (2%), Tamil Nadu (7%), West Bengal (19%) etc. This decrease is basically due to upcoming of new habitations and closing of some already existing schools. The decline in Bihar and Rajasthan is only marginal but that of Assam, Kerala, Sikkim, West Bengal etc is huge. Some of the states or UTs that experienced increase are Andaman & Nicobar Islands (2%), Arunachal Pradesh (2%), Goa (34%), Jammu & Kashmir (5%), Madhya Pradesh (5%), UP (2%), etc. The increase in the proportion of rural population having primary school within habitation is highest in Goa. Along with decreasing trend, in 1993 there exists a wide regional variation in the proportion of rural population having primary education within habitation. While Gujarat has higher proportion of rural population having primary school within habitation on one hand, Dadra and Nagar Haveli has lowest of 40 percent on other hand followed by Himachal Pradesh (45%), Tripura (55%), UP (60%), West Bengal (61%). Chandigarh (90%), Goa (92%), Gujarat (92%), Haryana (94%), Karnataka (91%), Maharashtra (91%), Mizoram (94%), Nagaland (92%), and Punjab (91%) have proportion above 90%.

TABLE 2.3

**PERCENTAGE OF RURAL POPULATION WITH AND WITHOUT
PRIMARY SCHOOLS/SECTIONS**

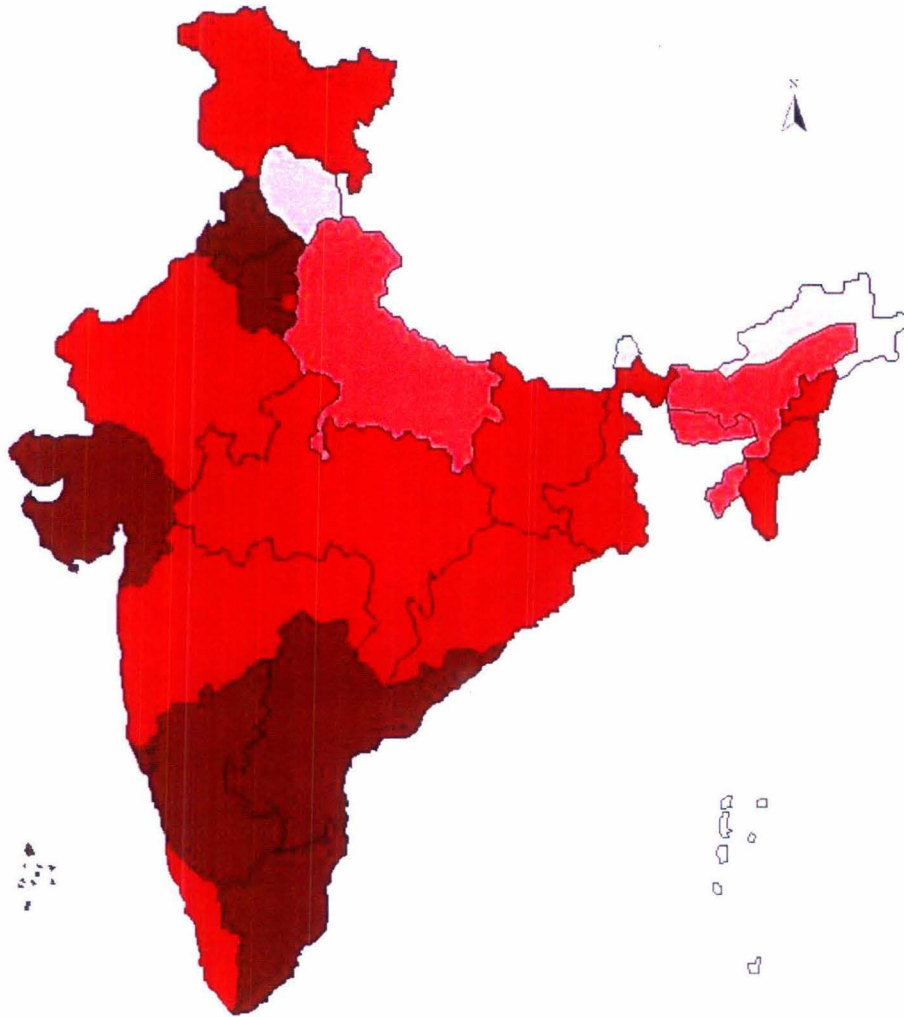
State/UTs	1986		1993	
	WITHIN HABTATION	WITHIH 1KM	WITHIN HABTATION	WITHIH 1KM
Andhra Pradesh	93	97	92	98
Andaman & Nicobar	68	83	70	82
Arunachal Pd.	66	73	70	78
Assam	82	94	66	89
Bihar	79	96	77	96
Chandigarh	97	100	90	96
D and N Haveli	51	85	40	87
Daman and Diu	77	95	72	99
Delhi	98	100	82	94
Goa	58	91	92	97
Gujarat	98	99	97	99
Haryana	97	99	94	98
Himachal Pd.	46	77	45	76
Jammu & Kashmir	78	91	83	92
Karnataka	92	97	91	97
Kerala	88	94	77	90
Lakshadweep	100	100	86	100
Madhya Pradesh	81	93	85	94
Maharashtra	92	98	91	96
Manipur	90	97	82	94
Meghalaya	81	89	74	88
Mizoram	98	98	94	96
Nagaland	99	99	92	95
Orissa	77	93	76	94
Pondicherry	89	99	75	98
Punjab	97	100	91	99
Rajasthan	87	93	85	93
Sikkim	72	83	66	83
Tamil Nadu	84	96	77	99
Tripura	57	84	55	85
Uttar Pradesh	56	89	60	89
West Bengal	80	97	61	93
INDIA	80	94	78	94

Source: Calculated from Fifth (1986) and Sixth (1993) All India Educational Survey, NCERT.

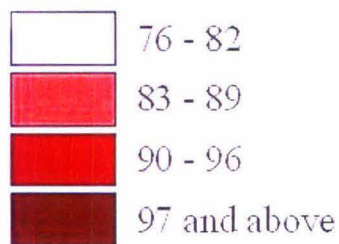
However, proportion of rural population having primary school within 1 km remain somehow constant at 94 percent from 1986 to 1993. But in 1993, there are still some states/UTs where proportion is less than 90 percent. They are Himachal Pradesh (76%), Arunachal Pradesh (78%), Andaman & Nicobar Islands (82%), Sikkim (83%), Tripura (85%), Dadra & Nagar Haveli (87%), Meghalaya (88%), UP

Map no. 2.1

RURAL POPULATION HAVING PRIMARY SCHOOL WITHIN ONE KM OF HABITATION, 1993



RURAL POPULATION
IN PERCENTAGE



0 200 kilometers

(89%) and Assam (89%). Because of hilly and forested terrain in Himachal Pradesh, Arunachal Pradesh, Andaman & Nicobar Islands, Sikkim etc, and also because of scattered settlements, the respective state government is not able to provide primary schools to every rural habitation. Also, wide regional variation exists in country from Himachal Pradesh scoring the least (76%) to Lakshadweep scoring the highest (100%). While more than 90 percent of the rural population may have gained access to primary schooling within 1 km, the facts provide no grounds for complacency.

In spite of the apparent expansion in educational facilities over the previous surveys (in absolute terms), there are many pockets that remain unserved even when existing norms are taken into consideration. A large proportion of the STs and SCs are still deprived of basic educational facilities according to the existing norms. According to sixth all India educational survey, the educational facilities available in scheduled castes and scheduled tribe dominated habitation have not change much but remain constant if we compare it with fifth all India educational survey.

(b) Primary Schools in Scheduled Caste Dominated Habitations

According to sixth all India educational survey, only 64 percent of SC dominated habitations have primary schools within the habitation and about 91 percent within 1 km of range, which is lesser than total population accessibility. From 1986 to 1993, the availability of primary school within habitation has gone down by 2 percent from 66 percent to 64 percent. In the states of Bihar, Gujarat, Karnataka, Maharashtra, Madhya Pradesh, Orissa, Rajasthan, UP etc the accessibility of SC dominated habitation to primary schools has increased. While on other hand, in states like Assam, Delhi, Himachal Pradesh, Kerala, Pondicherry, Punjab, Tamil Nadu, West Bengal etc accessibility has decreased.

According to sixth all India educational survey figures, there is large scale variation or regional disparities among states and union territories of India. Among the larger states, Orissa, Bihar, Himachal Pradesh, Tamil Nadu, Jammu & Kashmir, Karnataka, Maharashtra, UP, West Bengal and Rajasthan, the proportion of rural population unserved by even a primary school within the habitation exceeds 25 percent. In case of Bihar, Himachal Pradesh, UP and West Bengal, the percentage is either near 50 percent or more. In Himachal Pradesh, only 33 percent of SC dominated settlements have primary school within the habitation followed by UP (47%), Bihar (57%), West Bengal (59%), Orissa (68%) etc. In these states, enrolments of scheduled castes are also lower in comparison of total population.

Andhra Pradesh, Gujarat, Haryana, Arunachal Pradesh, Karnataka, Madhya Pradesh, Manipur, Punjab, Sikkim have higher percentage (more than 80%) of SC dominated settlement having primary school within habitation.

TABLE 2.4

POPULATION OF RURAL HABITATIONS (SC POPULATED) WITH AND WITHOUT PRIMARY SCHOOLS/SECTIONS

State/UTs	1986		1993	
	WITHIN HABTATION	WITHIH 1KM	WITHIN HABTATION	WITHIH 1KM
Andhra Pradesh	83	96	82	97
Andaman & Nicobar	#	#	#	#
Arunachal Pradesh	0	100	97	98
Assam	85	94	73	91
Bihar	55	88	57	91
Chandigarh	100	100	100	100
D and N Haveli	0	90	19	92
Daman and Diu	0	52	0	100
Delhi	93	100	82	91
Goa	6	87	96	96
Gujarat	71	98	91	96
Haryana	90	98	91	97
Himachal Pradesh	35	67	33	67
Jammu & Kashmir	70	90	73	89
Karnataka	84	95	86	95
Kerala	95	95	59	82
Lakshadweep	#	#	#	#
Madhya Pradesh	73	89	84	94
Maharashtra	50	92	73	91
Manipur	96	98	95	98
Meghalaya	#	#	#	#
Mizoram	#	#	#	#
Nagaland	#	#	#	#
Orissa	63	91	68	93
Pondicherry	70	99	50	97
Punjab	94	99	91	99
Rajasthan	73	83	72	87
Sikkim	93	96	92	98
Tamil Nadu	80	97	73	100
Tripura	61	89	57	89
Uttar Pradesh	34	83	47	86
West Bengal	79	96	59	92
INDIA	66	91	64	91

No SC dominated settlement

Source: Calculated from Fifth (1986) and Sixth (1993) All India Educational Survey, NCERT.

TABLE 2.5

POPULATION OF RURAL HABITATIONS (ST POPULATED) WITH AND WITHOUT PRIMARY SCHOOLS/SECTIONS

State/UTs	1986		1993	
	WITHIN HABTATION	WITHIH 1KM	WITHIN HABTATION	WITHIH 1KM
Andhra Pradesh	64	78	70	68
A & N Islands	69	82	69	85
Arunachal Prad.	64	71	70	78
Assam	75	92	68	87
Bihar	59	87	57	87
Chandigarh	#	#	#	#
D and N Haveli	52	85	45	85
Daman and Diu	75	97	76	98
Delhi	#	#	100	100
Goa	#	#	#	#
Gujarat	95	99	94	98
Haryana	#	#	#	#
Himachal Pradesh	58	63	53	77
Jammu & Kashmir	#	#	75	86
Karnataka	92	96	90	95
Kerala	69	74	60	76
Lakshadweep	100	100	86	100
Madhya Pradesh	66	87	71	87
Maharashtra	80	91	83	91
Manipur	94	96	86	92
Meghalaya	81	89	74	88
Mizoram	98	98	95	96
Nagaland	99	99	92	95
Orissa	66	84	66	87
Pondicherry	#	#	#	#
Punjab	#	#	#	#
Rajasthan	78	87	74	87
Sikkim	58	72	62	80
Tamil Nadu	64	82	72	100
Tripura	48	75	50	79
Uttar Pradesh	70	87	68	90
West Bengal	75	95	49	88
INDIA	72	88	71	89

No ST dominated settlement

Source: Calculated from Fifth (1986) and Sixth (1993) All India Educational Survey, NCERT.

(c) Primary Schools in Scheduled Tribe Dominated Habitation

The story of scheduled tribe is little better than scheduled castes. In 1993, about 71 percent of ST dominated habitations have primary school within habitation while 89 percent have within 1 km. If we compare those figures with fifth survey, we observe that percentage has gone down by 1 percent in case of primary school within habitation, while in case of primary school within 1 km; the percentage has gone up by 1 percent. So, overall within the 6-year gap, conditions remain the same. The under-privileged tribal groups in smaller habitations are still not reached.

In states like Bihar, Himachal Pradesh, Tripura, Kerala, and Sikkim about 40-50 percent of population are unserved by primary school within the habitation. In some of the states and union territories like Gujarat, Karnataka, Lakshadweep, Maharashtra, Manipur, Mizoram and Nagaland – about more than 80 percent of ST dominated habitation have primary schools within habitation.

2.3.3.2 Availability of Upper-Primary Schools

(a) Upper Primary Schools

The availability of upper primary school in India is worse than that of primary schools. According to sixth all India educational survey, about 37 percent of rural population have access to upper primary schools within habitation and 85 percent within 3 km of their habitation. So, in about 63 percent of rural population children aged between 11 to 14 years have to walk long distances to have access to upper primary schools. This all lead to low enrolment in upper primary particularly among weaker sections of society including girls. This condition is also evident from fifth all India educational survey 1986 figures which show the same scenario. During the period of 1986-93, no apparent expansion in the availability of upper primary education took place.

In some selected states and union territories, the proportion of rural population served by primary schools within habitation has declined over the previous survey. Some of them are Assam (2%), Kerala (18%), Lakshadweep (26%), Mizoram (2%), Pondicherry (16%), Punjab (2%), West Bengal (4%) etc. The decline in Kerala, Lakshadweep, Pondicherry and West Bengal is large enough but in other states and union territories it is only marginal. This decline in Kerala is mainly because of decrease in child population due to lowering of fertility. Some of the states and union

territories, which experienced increase, are Andhra Pradesh (2%), Andaman & Nicobar Islands (5%), Arunachal Pradesh (7%), Goa (40%), Jammu & Kashmir (4%), Karnataka (4%), Madhya Pradesh (3%), Nagaland (5%), Orissa (4%), UP (2%) etc. The highest percentage growth has occurred in Goa (40%) followed by Arunachal Pradesh, Nagaland etc.

TABLE 2.6

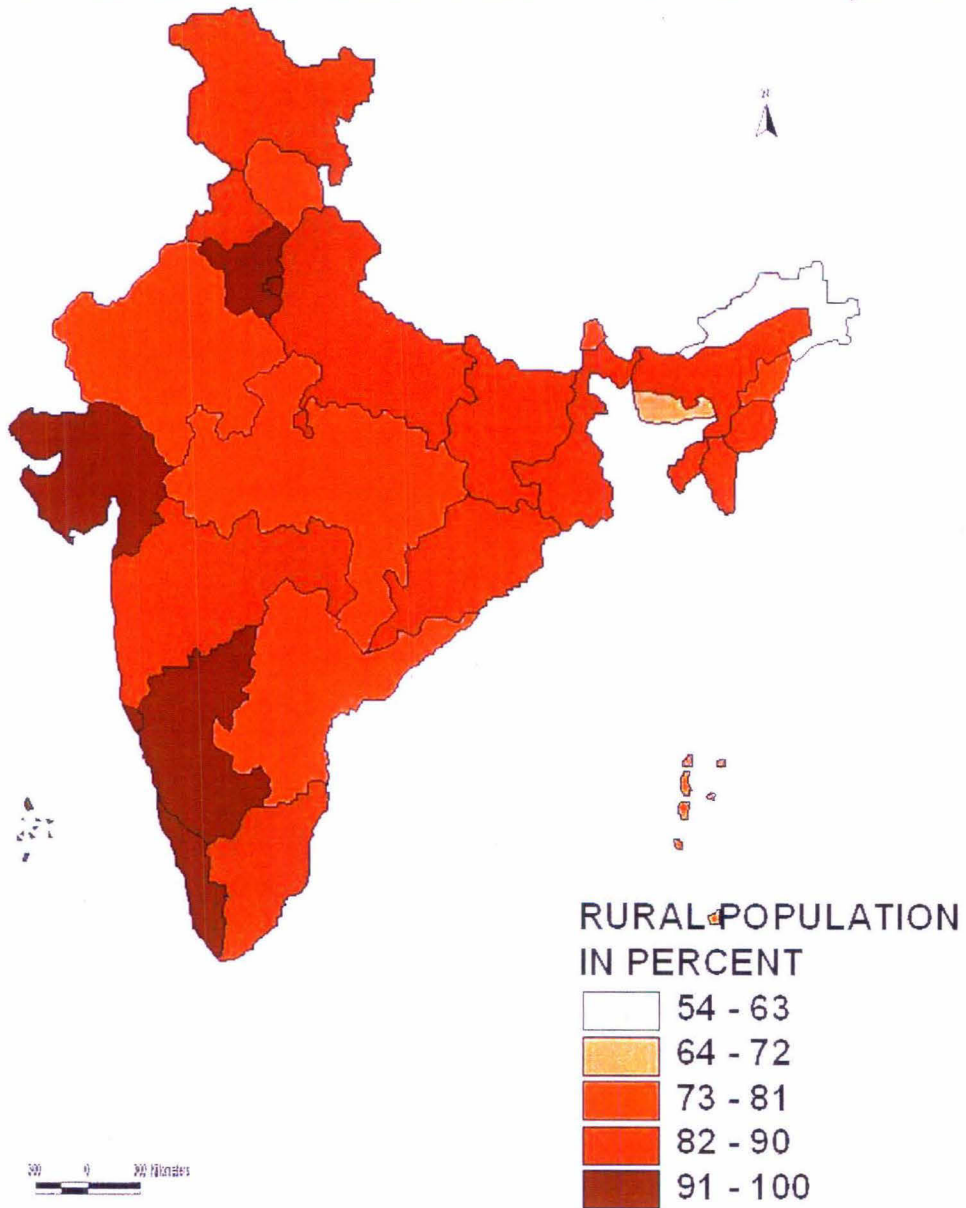
**PERCENTAGE OF RURAL POPULATION WITH AND WITHOUT
UPPERPRIMARY SCHOOLS/SECTIONS**

State/UTs	1986		1993	
	WITHIN HABTATION	WITHIH 3KM	WITHIN HABTATION	WITHIH 3KM
Andhra Pradesh	41	79	43	79
A & N Islands	39	74	44	77
Arunachal Pd.	26	42	33	54
Assam	24	83	22	87
Bihar	26	88	27	88
Chandigarh	57	100	47	99
D and N Haveli	9	65	10	76
Daman and Diu	61	98	64	100
Delhi	59	99	58	99
Goa	22	92	64	93
Gujarat	75	94	77	94
Haryana	62	93	65	93
Himachal Pradesh	18	76	17	78
Jammu & Kashmir	34	86	38	87
Karnataka	57	90	61	91
Kerala	69	96	51	92
Lakshadweep	99	99	73	99
Madhya Pradesh	28	70	31	73
Maharashtra	59	88	61	88
Manipur	38	80	37	82
Meghalaya	27	65	26	69
Mizoram	80	83	78	83
Nagaland	43	66	48	75
Orissa	30	83	34	88
Pondicherry	50	96	44	96
Punjab	47	92	45	90
Rajasthan	46	77	47	79
Sikkim	28	76	26	79
Tamil Nadu	34	84	35	88
Tripura	26	86	25	86
Uttar Pradesh	20	82	22	82
West Bengal	18	83	14	87
INDIA	37	84	37	85

Source: Fifth (1986) and Sixth (1993) All India Educational Survey, NCERT.

Map no. 2.2

RURAL POPULATION HAVING UPPER PRIMARY SCHOOL WITHIN THREE KM OF HABITATION IN INDIA, 1993



In 1993, there existed a wide regional variation in the proportion of rural population having upper primary schools within habitation. While Gujarat and Mizoram has higher proportion of rural population having upper primary school within habitation on one hand, and Dadra and Nagar Haveli has lowest of 10 percent on other hand followed by West Bengal (14%), Himachal Pradesh (17%), Assam (22%), Sikkim (26%), Bihar (27%), UP (22%), Tripura (25%), Madhya Pradesh (31%) etc. Along with Gujarat and Mizoram, Lakshadweep (73%), Haryana (65%), Daman & Diu (64%), Goa (64%), Karnataka (61%), and Maharashtra have proportion above 60 percent.

However, proportion of rural population having upper primary school within 3 km of habitation somehow increased marginally to 85 percent from 84 percent during 1986 to 1993. But in 1993, there are still some states and UTs where proportion is less than 80 percent. They are Arunachal Pradesh (54%), Meghalaya (69%), Madhya Pradesh (73%), Nagaland (75%), Himachal Pradesh (78%), Rajasthan (79%), Sikkim (79%) etc. Also wide regional variation existed in country from Arunachal Pradesh (54%) scoring the least to Daman & Diu scoring the higher (100%). While more than 85 percent of rural population may have gained access to upper primary schooling within 3 km, the facts provide no grounds for satisfaction since a lot more have to be done.

The under-privileged caste groups in smaller habitation are still not reached. The problem gains significance because many rural habitations have a population of less than 300 persons and are thus not eligible to have a regular primary or upper primary school according to state norms. The number of such habitations is large, ranging from about 14,000 in Tamil Nadu to more than 1,00,000 in UP. Provision of basic education to the children residing in small rural habitations remains a challenge for many state governments. Even going by the number of villages, in a state such a Tamil Nadu there are more than 2000 villages without any schooling facility, either formal or alternative, while in other states the number of such villages ranges from about 2500 in AP to more than 39,000 in UP. Similarly between 10,000 to more than 96,000 villages are deprived of basic facilities for the upper primary stage. Given that the number of alternative schools remains rather low, the provision of basic schooling facilities continues to be insufficient to cater to the needs of some population groups of the country.

TABLE 2.7

POPULATION OF RURAL HABITATIONS (SC POPULATED) WITH AND WITHOUT UPPERPRIMARY SCHOOLS/SECTIONS

State/UTs	1986		1993	
	WITHIN HABTATION	WITHIH 3KM	WITHIN HABTATION	WITHIH 3KM
Andhra Pradesh	19	79	17	79
Andaman & Nicobar	#	#	#	#
Arunachal Pradesh	0	0	45	60
Assam	22	84	23	90
Bihar	6	77	12	84
Chandigarh	0	100	0	100
D and N Haveli	0	100	6	84
Daman and Diu	0	100	0	100
Delhi	33	100	67	97
Goa	10	93	84	96
Gujarat	36	94	63	94
Haryana	32	86	41	86
Himachal Pradesh	9	68	10	72
Jammu & Kashmir	24	85	28	86
Karnataka	17	81	34	86
Kerala	23	100	27	81
Lakshadweep	#	#	#	#
Madhya Pradesh	7	66	23	73
Maharashtra	18	88	37	87
Manipur	39	89	23	81
Meghalaya	#	#	#	#
Mizoram	#	#	#	#
Nagaland	#	#	#	#
Orissa	16	82	27	88
Pondicherry	19	96	9	95
Punjab	27	93	32	90
Rajasthan	24	67	29	72
Sikkim	44	62	55	89
Tamil Nadu	24	84	25	85
Tripura	31	96	27	94
Uttar Pradesh	7	77	11	78
West Bengal	15	80	12	85
INDIA	15	80	18	82

No SC dominated settlement

Source: Calculated from Fifth (1986) and Sixth (1993) All India Educational Survey, NCERT

(b) Upper Primary Schools in Scheduled Caste Dominated Habitation

According to sixth all India educational survey, only 18 percent of SC dominated rural habitation have upper primary schools within the habitation and about 82 percent within 3 km of range, which is lesser than total population accessibility. From 1986 to 1993, the availability of upper primary school within habitation has gone up by 2 percent from 15 percent to 18 percent, those within 3 km range also by 2 percent from 80 percent to 82 percent. In the states and union territories of Arunachal Pradesh, Assam, Bihar, Goa, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Sikkim, UP etc. the accessibility of SC dominated habitation population to upper primary school has increased. While on other hand, in states like Manipur, Tripura and West Bengal etc accessibility has decreased.

According to sixth all India educational survey figures, there is a large-scale variation or regional disparities among states and union territories of India. Among the larger states, Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Manipur, UP, West Bengal etc. the proportion of rural population of SC dominated habitation unserved by even a upper primary school within the habitation exceeds 75 percent. In case of Bihar, Himachal Pradesh, UP and West Bengal, the percentage is near about 90 percent. In Himachal Pradesh, only 10 percent of population of SC dominated settlements has upper primary school within the habitation followed by UP (11%), West Bengal (12%), Bihar (12%), Andhra Pradesh (17%), Madhya Pradesh (23%), Assam (23%), Manipur (23%) etc. Goa, Gujarat, Delhi and Sikkim have higher percentage (more than 55%) of SC dominated settlement population having upper primary school within habitation.

(c) Upper Primary Schools in Scheduled Tribe Dominated Habitations

The story of scheduled tribe is not better than scheduled castes. In 1993, about 22 percent of population of rural habitation (ST dominated) have upper primary schools within habitation while 69 percent have within 3 kms. If we compare these figures with fifth survey, we observe that percentage has gone up by 3 percent in case of upper primary school within habitation while in case of upper primary school within 3 kms; it has gone up by 5 percent from 64 to 69. So, overall within the 6 years gap, conditions have improved little bit.

TABLE 2.8

POPULATION OF RURAL HABITATIONS (ST POPULATED) WITH AND WITHOUT UPPERPRIMARY SCHOOLS/SECTIONS

State/UTs	1986		1993	
	WITHIN HABTATION	WITHIH 3KM	WITHIN HABTATION	WITHIH 3KM
Andhra Pradesh	12	52	10	50
Andaman & Nicobar	48	75	44	79
Arunachal Pd.	21	35	34	53
Assam	15	76	17	80
Bihar	10	69	11	70
Chandigarh	#	#	#	#
D and N Haveli	8	64	11	73
Daman and Diu	30	100	53	100
Delhi	#	#	100	100
Goa	#	#	#	#
Gujarat	45	85	52	86
Haryana	#	#	#	#
Himachal Pd.	22	61	19	68
Jammu & Kashmir	#	#	19	67
Karnataka	31	74	40	80
Kerala	68	74	26	62
Lakshadweep	99	99	73	99
Madhya Pradesh	12	55	15	59
Maharashtra	21	61	28	66
Manipur	40	61	37	69
Meghalaya	27	65	25	69
Mizoram	80	83	78	84
Nagaland	43	66	45	74
Orissa	12	59	18	74
Pondicherry	#	#	#	#
Punjab	#	#	#	#
Rajasthan	24	70	24	71
Sikkim	23	71	29	79
Tamil Nadu	12	32	26	74
Tripura	13	69	12	70
Uttar Pradesh	20	67	26	80
West Bengal	10	60	6	73
INDIA	19	64	22	69

No ST dominated settlement

Source: Calculated Fifth (1986) and Sixth (1993) All India Educational Survey, NCERT.

In larger states like Andhra Pradesh, Assam, Bihar, Himachal Pradesh, Orissa, West Bengal, Madhya Pradesh etc. about 80-90 percent of population are unserved by upper primary school within the habitation. In some of the states and

UTs like Daman & Diu, Gujarat, Lakshadweep, Mizoram, Nagaland, Andaman & Nicobar Islands – only about more than 40 percent of ST dominated habitation population have upper primary schools within habitation.

2.3.4 Quality of Elementary Education in India

The quality of facilities available in school greatly influences enrolment and dropout. The availability of an adequate number of rooms, permanent buildings, blackboard, qualified teachers, etc. creates the necessary environment for learning. In the absence of these, the learning environment vitiated and performance of students gets affected. This often leads parents to undervalue education and hence to low enrolment and high dropout. According to the 5th all India Educational Survey (NCERT, 1992) in 1986-87, there was 47 percent primary schools in rural India, which did not have even one teacher and 66 percent schools, had less than three teachers. Similarly, there were 16 percent primary school teachers in rural India who were not even matriculate. That the availability of school facilities has an impact on enrolment, dropout and educational performance could be verified from the fact that the correlation coefficient of primary enrolment rate (rural) with percentage of useable blackboard is +0.70 and with percentage of schools with more than three teachers is +0.49. The coefficient of correlation of primary enrolment rate of girls with percentage of female teachers is as high as +0.82.

3.3.4.1 Schools having pucca building

The above rudimentary correlation analysis tends to suggest that individual supply and demand side factors do influence school participation. However, such an analysis often overstates the role of each factor in determining access to education. In reality, it is not a single supply or demand side factor, but a combination of many factors and their interaction that determine access. Thus, availability of school within habitation alone cannot guarantee access unless the schools have an adequate number of teachers, blackboards and other necessary infrastructure facilities.

According to the sixth All India Educational survey, the percentage of total primary schools functioning in pucca buildings was 65 percent, which increases to 81 percent during 7th All India Educational survey (2002). Still about 7 percent of the primary

TABLE 2.9**PERCENTAGE OF PRIMARY SCHOOLS HAVING PUCCA BUILDING**

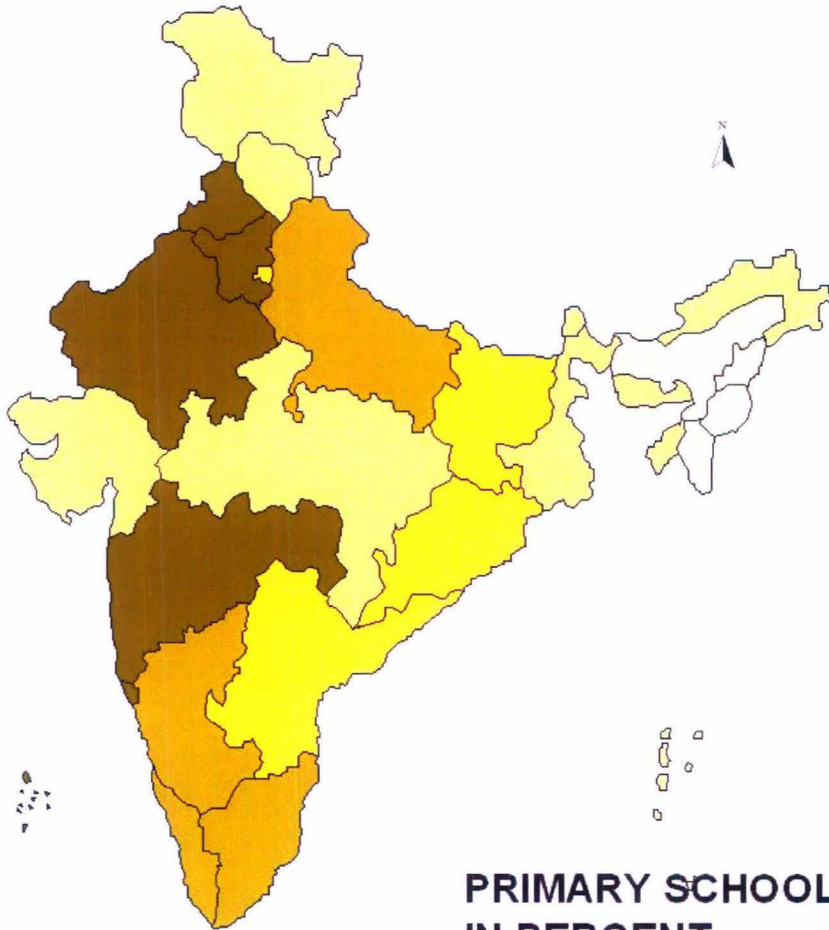
State\UTs	1986	1993	2002
Andhra Pradesh	71	75	83
A & N Islands	58	54	72
Arunachal Prad.	15	27	48
Assam	8	14	37
Bihar	33	61	81
Chandigarh	91	83	92
D and N Haveli	62	89	87
Daman and Diu	100	100	98
Delhi	50	48	82
Goa	85	97	98
Gujarat	88	82	73
Haryana	86	93	99
Himachal Pradesh	25	35	73
Jammu & Kashmir	30	50	64
Karnataka	84	86	90
Kerala	70	78	91
Lakshadweep	100	100	100
Madhya Pradesh	54	57	72
Maharashtra	67	70	95
Manipur	2	10	19
Meghalaya	8	22	53
Mizoram	0	2	23
Nagaland	7	4	15
Orissa	48	59	79
Pondicherry	62	56	81
Punjab	85	91	97
Rajasthan	78	91	95
Sikkim	30	17	53
Tamil Nadu	79	62	87
Tripura	4	17	59
Uttar Pradesh	74	90	93
West Bengal	28	37	68
INDIA	57	65	81
C.V.	0.61	0.54	0.33

Source: Calculated from Fifth (1986), Sixth (1993) and Seventh (2002) All India Educational Survey, NCERT.

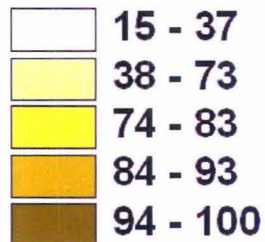
school is functioning either in kuchcha structure, tent or open spaces and 12 percent in partly pucca structure. From the table, we can observe that there are large variations across states. In the Northeastern states of Assam, Arunachal Pradesh, Manipur, Mizoram, Nagaland, Sikkim, Meghalaya, the percentage of primary schools having

map no. 2.3

PRIMARY SCHOOL HAVING PUCCA BULDING IN INDIA,2002



PRIMARY SCHOOLS IN PERCENT



0 100 Kilometers

pucca building is either about 50 percent or below in 2002. Nagaland recorded the lowest percentage of 15 percentages, followed by Manipur (19%), Mizoram (23%), Assam (37%), Arunachal Pradesh (48%), etc. In the North-eastern states, the structure of the schools are made up of locally available building materials like wood, logs, bamboo, stones etc., that's why their percentage are so low.

TABLE 2.10

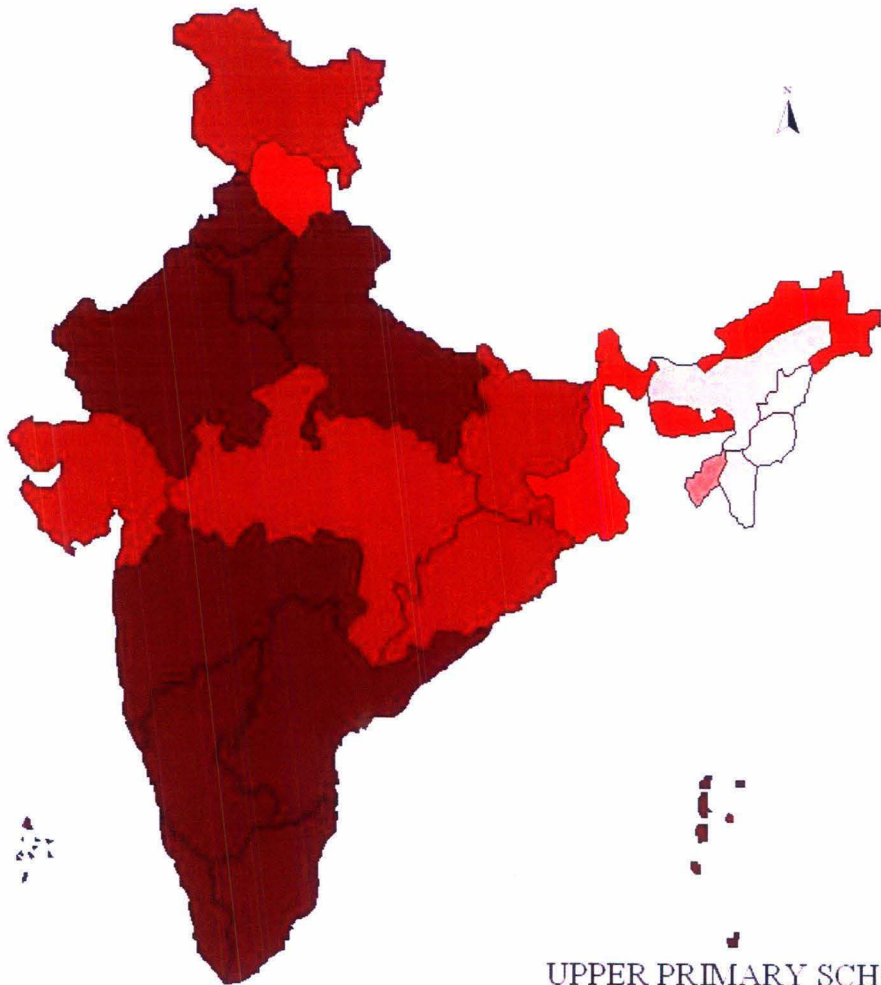
**PERCENTAGE OF UPPER PRIMARY SCHOOLS HAVING
PUCCA BUILDING**

State/UTs	1986	1993	2002
Andhra Pradesh	78	73	89
A & N Islands	93	70	86
Arunachal Pd.	41	42	59
Assam	8	10	27
Bihar	38	45	70
Chandigarh	97	97	100
D and N Haveli	100	100	98
Daman and Diu	100	100	100
Delhi	55	64	91
Goa	95	97	99
Gujarat	96	92	83
Haryana	92	96	98
Himachal Pradesh	25	36	66
Jammu & Kashmir	42	64	78
Karnataka	90	86	92
Kerala	67	75	88
Lakshadweep	100	100	95
Madhya Pradesh	67	65	73
Maharashtra	75	73	95
Manipur	3	9	21
Meghalaya	23	25	56
Mizoram	0	4	30
Nagaland	31	24	36
Orissa	44	43	69
Pondicherry	65	56	63
Punjab	92	90	92
Rajasthan	85	93	92
Sikkim	49	24	53
Tamil Nadu	78	57	88
Tripura	3	7	49
Uttar Pradesh	76	78	90
West Bengal	50	44	62
INDIA	69	69	82
C.V.	0.53	0.52	0.31

Source: Calculated from Fifth (1986), Sixth (1993) and Seventh (2002) All India Educational Survey, NCERT.

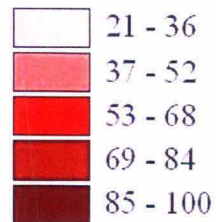
Map no. 2.4

UPPER PRIMARY SCHOOL HAVING PUCCA BUILDING IN INDIA, 2002



0 100 200 Kilometers

UPPER PRIMARY SCHOOL
IN PERCENT



In Daman & Diu, Goa, Haryana, Lakshadweep, Maharashtra, Punjab, Uttar Pradesh- the percentage of primary school having pucca building is above 95 percent. The Inter-state variation has come down from fifth educational survey to sixth one as evident from coefficient of variation. The lowest inter state variation has occurred in 2002 as coefficient of variance is 0.33.

The upper-primary schools condition is somewhat similar to primary school. In 1993, about 69 percent of upper-primary schools are running in pucca building, about 21 percentage in partly pucca building and 10 percent are in thatched huts, tents, and open spaces. These figures show some better sign in 2002, when 82 percentages of upper primary schools have pucca building and 5 percent without building. Some states like Assam (27%), Manipur (21%), Mizoram (30%), Nagaland (36%), Tripura (49%) have lowest percentage of upper primary school having pucca building. The story is somewhat similar to that of primary schools. Some states\UTs have show better picture like Chandigarh (100%), Dadra and Nagar Haveli (98%), Daman & Diu (100%), Goa (99%), Delhi (91%), Karnataka (92%), Maharashtra (95%), Uttar Pradesh (90%) etc. The inter-state variation is quite evident as also suggested by high coefficient of variance of 0.31. But one thing is to be noted that C.V. is reduced from 1986 to 2002 i.e. 0.53 to 0.31 showing decreasing inter-state variation. In 2002, the inter-state variation of school having pucca building is more among primary school than in upper primary school.

2.3.4.2 Availability of teachers

The teacher being the main vehicle for the qualitative improvement in school education, the National Policy on Education 1986 calls for a substantial improvement in the condition of works, number or availability and the quality of teacher's education. Of the total primary schools in the country according to the 7th all India Educational survey (2002), 15 percent are single teacher schools and another 1.3 percent do not have any teacher at all. The corresponding figures at the time of the sixth survey were 20.12 percent and 0.77 percent respectively. This shows a decline in the percentage of single teacher schools since the sixth survey but primary schools having no teacher at all have increased. According to NCERT documents, there is decline in the percentage of single teacher schools since the fifth survey (1986). NPE, 1986 envisaged that each primary school should be provided with two teachers under the Operation Blackboard (OB) scheme. The aforesaid decrease may be due to the

TABLE 2.11

PUPIL TEACHER RATIO IN PRIMARY SCHOOL

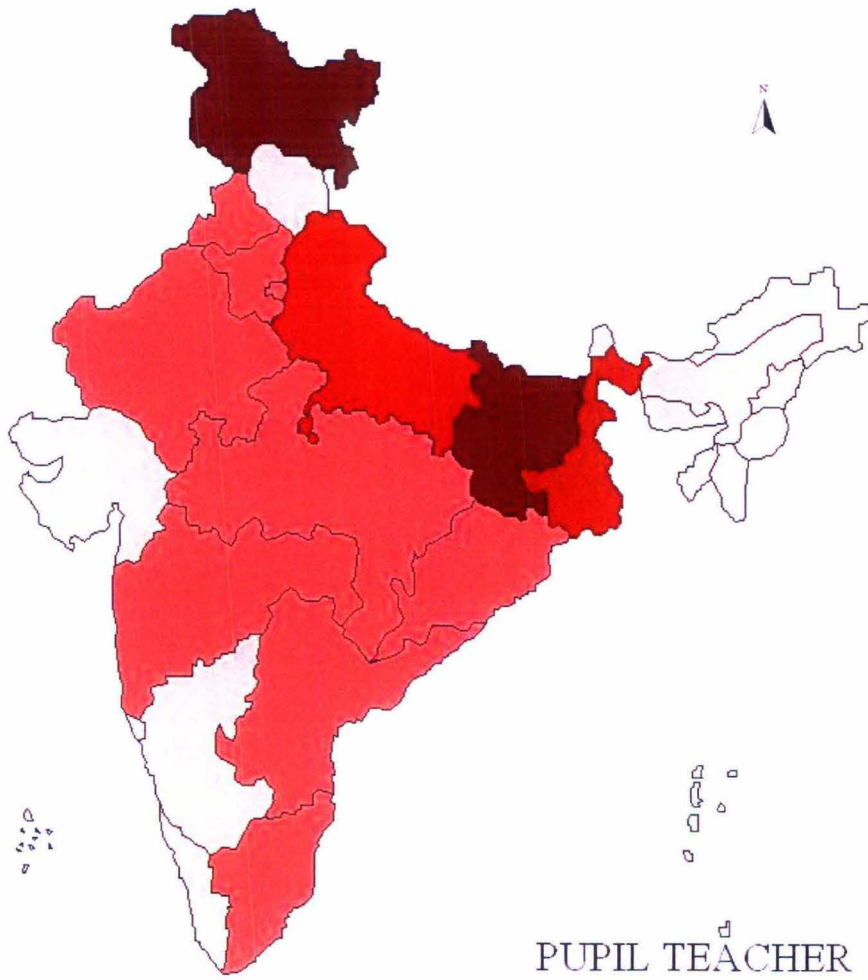
STATES/UTS	1986	1993	2002
Andhra Pradesh	44	49	33
A & N Island	31	20	17
Arunachal Pradesh	34	27	27
Assam	36	35	30
Bihar	60	50	76
Chandigarh	28	31	34
D and N Haveli	35	40	40
Daman and Diu	41	30	39
Delhi	34	43	40
Goa	29	21	21
Gujarat	61	36	31
Haryana	53	47	41
Himachal Pradesh	38	36	22
Jammu & Kashmir	33	24	19
Karnataka	48	39	26
Kerala	40	31	28
Lakshadweep	28	22	20
Madhya Pradesh	39	40	38
Maharashtra	42	37	36
Manipur	17	14	21
Meghalaya	37	24	22
Mizoram	27	23	19
Nagaland	20	12	12
Orissa	31	31	38
Pondicherry	34	25	21
Punjab	39	42	38
Rajasthan	40	37	41
Sikkim	15	11	12
Tamil Nadu	56	37	34
Tripura	36	23	23
Uttar Pradesh	41	42	53
West Bengal	41	43	53
INDIA	44	40	42
C.V.	0.29	0.34	0.43

Source: Calculated from Fifth (1986), Sixth (1993) and Seventh (2002) All India Educational Survey, NCERT.

impact of this scheme. The problem of zero teacher and single teacher schools is acute in the rural areas. Further government and local body managed schools together have a larger proportion of zero-teacher and single teacher schools as compared to schools managed by private agencies. It is heartening to note that the percentage of single

Map no. 2.5

PUPIL TEACHER RATIO IN PRIMARY SCHOOL IN INDIA, 2002



PUPIL TEACHER RATIO

White	12 - 31
Light Red	32 - 51
Medium Red	52 - 70
Dark Red	71 - 90

0 200 Kilometers

teacher schools has decreased in all the states and UTs since the fifth survey. However, more than 20 percentages of primary schools in Andhra Pradesh (19%), Arunachal Pradesh (44.6%), Jammu & Kashmir (20%), Jharkhand (31.8%) etc. are single teacher schools in 2002.

There should not be more than 30 to 40 students in a class for efficient conduct of teaching. If the class size is small the teacher can pay individual attention to students according to their needs. The overall pupil-teacher ratio in primary school in the country is 42. This ratio is higher in rural schools (44) than the school in urban areas (36). The pupil-teacher ratio has increased from sixth educational survey from 40 to 42. Among states and UTs, Sikkim has the lowest pupil-teacher ratio of 12. Andaman & Nicobar Islands, Goa, Jammu & Kashmir, Lakshadweep, Manipur, Mizoram, Nagaland, Pondicherry have kept their P-T ratio around 20 or less. On the other hand, the problems of crowded classrooms are acute in states and union territories like Bihar (76), UP (53), West Bengal (53) etc. All other states and UTs have pupil-teacher ratio below national average. Andhra Pradesh and Haryana have done good performances as their P-T ratio has gone down from fifth educational survey (1987) to 7th survey (2002). But from 5th survey to 7th survey, the inter state regional disparity has gone up as the value of coefficient of variance rises from 0.29 to 0.43.

The conditions of the upper primary schools are somehow better than primary schools. The overall P-T ratio was 34 in 2002 better than 36 in 1993. It is better in urban schools than rural one. Some of the states & UTs like Andaman & Nicobar Islands (17), Assam (16), Goa (16), Himachal Pradesh (15), Jammu & Kashmir (18), Manipur (17), Meghalaya (17), Mizoram (11), Nagaland (13), Punjab (18), Sikkim (15), Tripura (20) have P-T ratio either 20 or below. The worst performers are Bihar (68), West Bengal (50), Tamil Nadu (40). As in primary schools, regional disparity has increases over period of time from fifth survey to 7th survey as C.V. increases from 0.29 to 0.45.

At a point of time when there appears to be a significant push towards increasing budgetary allocation for education, India may be “wasting a considerable share of its education budget and missing an opportunity to educate its children.”

TABLE 2.12**PUPIL TEACHER RATIO IN UPPER PRIMARY SCHOOL**

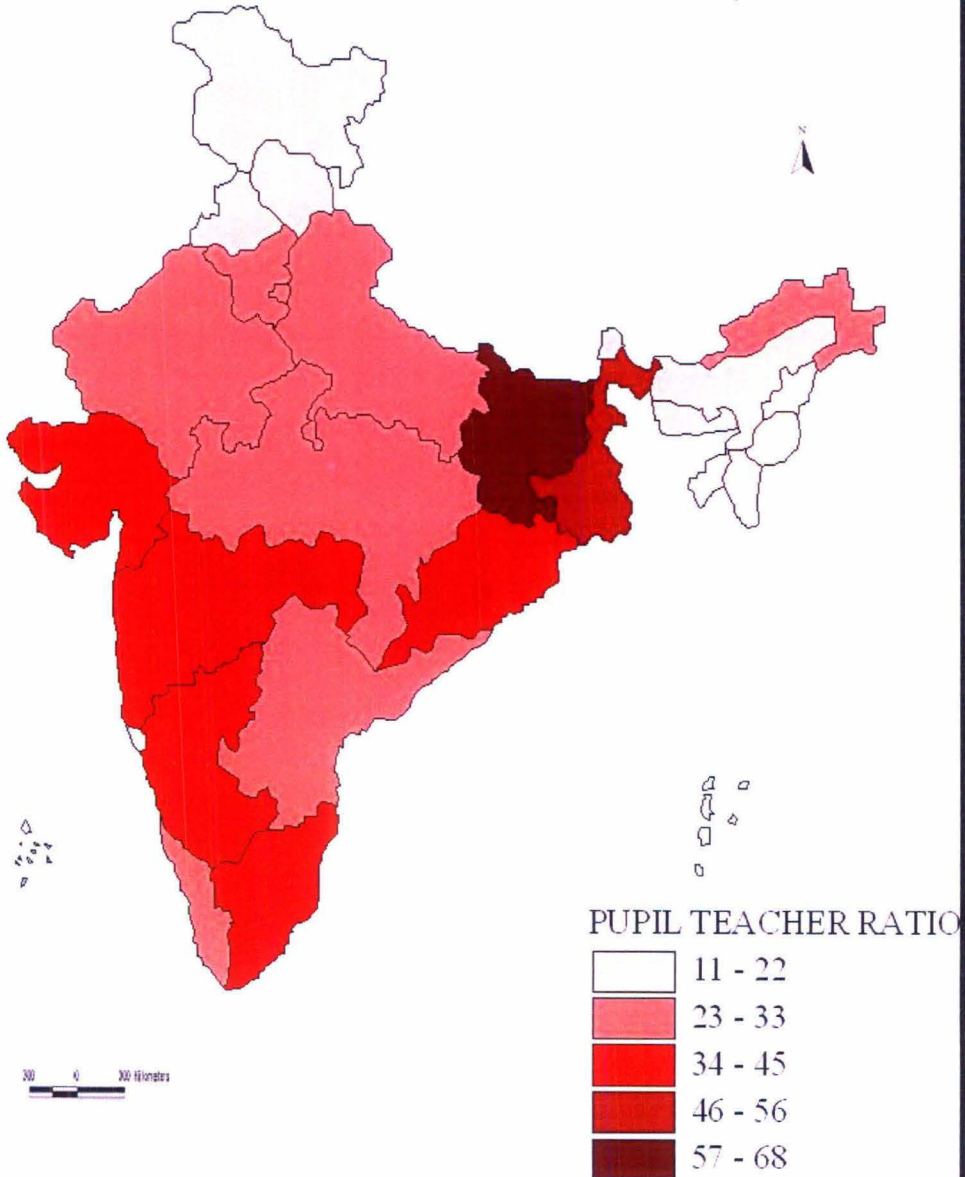
STATE/UTS	1986	1993	2002
Andhra Pradesh	24	45	30
A & N Islands	26	21	17
Arunachal Pradesh	17	24	25
Assam	30	20	16
Bihar	25	43	68
Chandigarh	31	22	24
D and N Haveli	27	33	44
Daman and Diu	36	36	31
Delhi	31	28	27
Goa	37	19	16
Gujarat	21	41	38
Haryana	40	40	26
Himachal Pradesh	29	20	15
Jammu & Kashmir	19	20	18
Karnataka	33	54	37
Kerala	30	30	28
Lakshadweep	18	25	21
Madhya Pradesh	29	29	29
Maharashtra	37	38	37
Manipur	16	15	17
Meghalaya	21	19	17
Mizoram	13	14	11
Nagaland	15	14	13
Orissa	31	31	38
Pondicherry	29	29	23
Punjab	39	23	18
Rajasthan	18	29	31
Sikkim	17	15	15
Tamil Nadu	37	42	40
Tripura	29	21	20
Uttar Pradesh	35	29	33
West Bengal	41	34	50
INDIA	29	36	34
C.V.	0.29	0.36	0.45

Source: Fifth (1986), Sixth (1993) and Seventh (2002) All India Educational Survey, NCERT.

A World Bank-Harvard University study has found that in India one in four government primary school teachers are absent on any given day, and that only 50 percent would be actually teaching. The study has suggested a variety of potential reforms in the system.

Map no. 2.6

PUPIL TEACHER RATIO IN UPPER PRIMARY SCHOOL IN INDIA, 2002



Teacher absence was found to be less where a system of 'daily incentives' to attend work existed. Teachers were less likely to be absent from schools that had been inspected recently; those that had better infrastructure and were close to a paved road. "The study finds little evidence that attempting to strength local communities ties will reduce absence." Private school teachers are less likely to be absent than public school teachers in general but are 8 percentage points less likely to be absent than public school teachers in the same village.

The report, which compares the situation in India with other countries, notes that it has "the second highest average absence rate among the eight countries for which absence calculations based on a similar methodology are available" The only country worse off than India was Uganda, with a 27 percent rate. It was only 16 percent in Bangladesh and 19 percent in Indonesia.

Within India, Maharashtra had the lowest rate of 14.6 percent. In Kerala it was 21.2 percent, in Tamil Nadu 21.3 percent, in Karnataka 21.7 percent and in West Bengal 24.7 percent. On the higher side, the rate was 34.4 percent in Punjab, 37.8 percent in Bihar and 41.9 percent in Jharkhand.

The study also sought to find the reasons for teacher absence. It was considerably higher than could be accounted for by non-official teaching duties- such as staffing polling stations during elections or conducting immunization campaigns. Detailed interaction with the head teacher or primary respondent showed that only 4 percent of the instances of absence were to "official non-teaching duties". Absence to the extent of another 8 to 10 percentage points could be potentially attributed to annual leave, and other officially sanctioned reasons. The study suggests that a variety of potential reforms may be worth exploring. These could range from improving school infrastructure to increasing the frequency of inspections to experimenting with new and potentially more effective forms of local control.

2.3.4.2 Availability of other facilities

In the post-independence era, there has been a quantitative expansion of education at all levels, resulting in a considerable increase in enrolment. This has, however, not been followed by a corresponding increase in the physical facilities needed for attracting to and retaining in schools the children in the early segment of the school going age, nor has an appropriate academic atmosphere, been created among the higher segment of the school-going students, through better libraries,

laboratories and other facilities. A large number of schools still continue to function in thatched huts\kuchcha building\ tent or even in open spaces, in spite of the norms regarding school buildings laid down for recognition and affiliation by different agencies.

According to the sixth all India educational survey, out of the total 8,22,486 schools in the country; 5,47,608(66.58%) schools have pucca buildings; 1,58,226(19.24%) are housed in partly pucca buildings; 68,438(8.32%) are functioning in the kuchcha buildings; 20,744(2.52%) in the thatched huts; 2,352(0.29%)in tents; 25,118(3.05%) in open spaces. Out of 5,70,455 primary school in the country; 2,14,933(37.68%) schools have adequate number of classrooms, while 84,055(14.73%) require one additional classroom; 2,11,210(37.02%) require two or three additional classrooms; 53,482(9.38%) four or five additional classrooms; and 6,775(1.19%) more than five additional classrooms. The total number of additional classroom required by these schools is 9,85,712. Of the 1,62,805 upper primary schools, still 64.82 percent require 3,53,804 additional classrooms.

Urinal facilities are one of the essential requirements of a school for its smooth functioning. The sixth survey shows that only 31.52 percent schools have urinal facilities, including 19.48 percent schools having facility of separate urinals for girls, out of the total number of 8,22,486 schools in the country. Out of the total primary schools in the country in the country, only 18.93 percent schools have urinal facilities including 8.66 percent schools having the facility of separate urinals for girls. Statewise analysis reveals that in all the states except Haryana (56.30%), Kerala (81.38%), Mizoram (72.53%) and Punjab (52.49%); urinal facilities are available in less than 50% of the schools. In the states of Bihar (3.40%) and Karnataka (4.57%) urinal facilities exist in less than 5 percent of the schools. The position is even worse in the case of separate urinals for girls as Kerala is the only state where these facilities are available in more than 50 percent of the schools. In case of upper primary schools only 48.44 percent have urinals facilities whereas separate urinals for girls are available in 31.54 percent of schools only.

Drinking water is essential for satisfying a physical a physiological need. However, a large number of schools do not have drinking water facility. According to 6th all India Educational survey, 44.23 percent primary schools have drinking water facility within the school premises as compared to 47.35 percent primary schools in the fifth survey. This shows that although there is slight increase in

the number of schools with drinking water facility, yet in terms of percentage there is deterioration in these facilities. Statewise analysis of data reveals that all the states except Goa (60.41%), Haryana (76.95%), Himachal Pradesh (61.46%), Kerala (76.16%), Punjab (87.72%), and Tamil Nadu (62.34%) have drinking facilities in less than 60 percent of the schools. In the upper primary schools about 63.47 percent of schools have drinking water facilities within the school premises as against 67.09 percent schools in the fifth survey.

Similarly only 40.52 percent of primary schools have got a library whereas in upper primary schools the percentage is 60.40. The useable blackboards reported to have in 65.39 percent of primary schools. So, still about 35 percent have no useable blackboards. The corresponding figure for upper primary having useable blackboard is 82.99 percent.

All these facilities are essential for the proper and smooth functioning of schools. To get a clear picture about the position of different states and union territories in the provisions of different facilities in their primary and upper primary schools, we prepared a composite index of these infrastructure facilities according to the sixth all India educational survey (1993). In the composite index, states or union territories performing well are given high ranking (face value) and those performing unsatisfactory are given low ranking (face value). In the end, all these ranks are added and those scoring the higher total are performing better than those scoring less.

In the primary school sector, Delhi, Haryana, Lakshadweep, Daman & Diu, Pondicherry, Kerala, Punjab, Tamil Nadu, Andaman & Nicobar Islands, Rajasthan and Goa are in the high performer category providing basic facilities in their primary schools. The National Capital Territory of Delhi tops the list. Surprisingly, Rajasthan (one of Bimaru states) is also high performer. The low performer category states\UTs include Karnataka, Arunachal Pradesh, Manipur, Tripura, Madhya Pradesh, Nagaland, Chandigarh, Mizoram, Orissa, Bihar, Jammu & Kashmir, Assam and Meghalaya. Assam and Meghalaya are the worst performers. Rests are performing in-between.

TABLE 2.13

COMPOSITE INDEX FOR PRIMARY AND UPPER-PRIMARY SCHOOL

1993

Primary school			Upper- Primary school		
Ranking	State\UTs	Total value	Ranking	States\UTs	Total value
1	Delhi	163	1	Delhi	160
2	Haryana	160	2	Haryana	158
3	Lakshadweep	154	3	Chandigarh	149
3	Daman and Diu	154	4	Andaman & Nicobar	148
5	Pondicherry	143	5	Lakshadweep	147
6	Kerala	142	6	D and N Haveli	139
7	Punjab	131	7	Kerala	138
8	Tamil Nadu	128	8	Daman and Diu	137
9	Andaman & Nicobar	122	9	Pondicherry	133
10	Rajasthan	121	10	Rajasthan	122
10	Goa	121	11	Sikkim	119
12	Maharashtra	118	12	Punjab	117
13	Gujarat	109	13	Gujarat	116
14	Uttar Pradesh	105	14	Goa	110
15	D and N Haveli	102	15	Tamil Nadu	107
16	Himachal Pradesh	96	16	West Bengal	104
17	Sikkim	94	17	Maharashtra	96
18	West Bengal	90	18	Arunachal Pradesh	95
19	Andhra Pradesh	76	19	Uttar Pradesh	91
20	Karnataka	73	20	Bihar	85
21	Arunachal Pd.	71	21	Manipur	84
22	Manipur	70	22	Andhra Pradesh	78
23	Tripura	69	23	Karnataka	74
24	Madhya Pradesh	68	24	Himachal Pradesh	67
25	Nagaland	66	25	Nagaland	64
26	Chandigarh	55	26	Tripura	62
27	Mizoram	53	27	Madhya Pradesh	60
27	Orissa	53	28	Jammu & Kashmir	56
29	Bihar	44	29	Orissa	54
30	Jammu & Kashmir	43	30	Mizoram	51
31	Assam	35	31	Assam	40
32	Meghalaya	28	32	Meghalaya	31

Source: Calculated from sixth all India educational survey, 1993

Among the upper primary schools, Delhi again topped the list in providing basic facilities in their upper primary schools followed by Haryana, Chandigarh, Andaman & Nicobar Islands, Lakshadweep, Dadra and Nagar Haveli,

Kerala, Daman & Diu, Pondicherry and Rajasthan. Among the poor performer category are Karnataka, Tripura, Madhya Pradesh, Nagaland, Mizoram, Orissa, Bihar, Jammu & Kashmir, Assam, Himachal Pradesh and Meghalaya. Meghalaya and Assam again acquires the lowest position. Rests are medium performers that include Goa, Tamil Nadu, Bihar, Gujarat etc.

2.4 CONCLUSIONS

India has witnessed phenomenal educational development both in quantitative and qualitative terms, since independence. But the national goals of universal elementary education and total eradication of illiteracy have still remained elusive. Since primary education has been made a fundamental right, the stress is often on the supply side factors which include availability of schools in the vicinity, facilities in the school, teacher quality, quality of education etc.

The number of educational institutions has grown largely but it is not sufficient to accommodate the increasing child population. The government is still the largest provider of elementary education. In 1993, about 78 percent of the rural population has a primary school within habitation and 94 percent has within the range of 1 km from the habitation including those primary schools that are within habitation. However, the expansion of primary schools facilities in rural areas is inadequate, keeping in view the commitment of the states to the goals of universal elementary education. The percentage of scheduled caste and scheduled tribe dominated rural habitation having primary schools within habitation is lower than that of total population.

The availability of upper primary school in India is not better than that of primary schools. According to sixth All India Educational Survey, about 37 percent of rural population have access to upper primary schools within habitation and 85 percent within 3km of their habitation. But in states and union territories, there is a wide regional disparities, in provision of these educational institutions. The scheduled case and scheduled tribes are also lagging behind in getting access to schools.

Apart from availability of schools, the quality of facilities in school also determines the enrolment and dropout. In 2002, only 81 percent of primary schools and 82 percent of upper primary schools are pucca. These figures have increased over the years. The pupil-teacher ratio in primary and upper primary school in 2002 is 42 and 34 respectively. The absenteeism of teacher is rampant across

different parts of India. The availability of other ancillary facilities in elementary school is also not adequate. Some states are better in providing their students ancillary facilities, some are logging behind. The union territories of India, Punjab, Kerala, Haryana, Tamil Nadu, Goa etc. are front-runners.

Inspite of all these achievements, more needs to be done to achieve universal elementary education in our country. The regional disparity in provision of elementary education is glaring which also needs to be rectify on war footing.

CHAPTER THREE
ENROLMENT AND RETENTION IN
ELEMENTARY EDUCATION IN INDIA

3.1 INTRODUCTION

The goal of universalization of elementary education has not been achieved ever after 57 years of our independence. Further, the numbers of children that have to be brought into the fold of schooling remain very large. These all reflect the lack of priority assigned to this issue and points to the enormity of the task that lies ahead. According to the NSSO (1998), only 66 percent of the total children in the age-group of 6-10 years (both inclusive) and 43 percent of those in the 11-13 years age-group (both inclusive) were attending school at the primary and upper-primary level respectively. However, many children in the higher age group of 11-13 year attend the primary level and a few children in the 6-10 years age group attend higher classes. As such, the attendance ratio of children in the 6-10 years age-group went up to 69 percent and that of children in the 11-13 year age-group to 72 percent. The NFHS-2 presents a somewhat better picture with 74 percent girls and 83 percent boys in the age-group of 6-13 years attending schools in 1998-1999. Taking the population projections and estimates of age-specific enrolment into account, the Tapas Majumdar committee (1999) estimated the size of out of school children in 2001 to be about 60-70 million. By any account this a large number and getting them to school not a easy task.

It is not only the size of out of school children, which poses a challenge for policy members and the civil society. Recent trends in enrolment also make clear that it is more difficult to get children into school, who remain outside the school system now. This is obvious from the stagnation or decline in overall enrolments seen in many districts during the second half of the 1990s. (Aggarwal 2001). What is more sad is the fact that this trend is seen not only in districts where the age-specific population ratio is on the decline but that it also includes many districts from states yet far from that plateau.

Although stagnation in enrolment ratios is an almost universal phenomenon, it is generally experienced after attaining a high rate of enrolment. Once any nation, state or district reaches the net enrolment level of higher than 90 percent,

it is not uncommon to witness a slowing down in the rate of increase of this ratio (Jhingran and Jha, 2004). Kerala is finding it difficult to increase its level of enrolment in the range of 90-94 percent at primary and upper primary levels. However, what is really distressful is the fact that many states and districts in educationally backward states appear to have reached or are going through a period of stagnation in school participation ratios at much lower stage. About three-fourth of the 57 districts that registered a decline in enrolment (out of 125 districts analyzed) during 1999-2000 to 2000-01, belong to states with net attendance ratio (NAR) between 58 and 85 percent. (Aggarwal, 2001).

The fact that this is the situation in districts that have been implementing the district Primary Education Programme (DPEP), a central government sponsored programme investing substantially in several aspects of primary education including infrastructure, teacher training, institutional strengthening etc for the last five to seven years, make the issue more serious. This coupled with the fact that a substantial proportion of the so-called 'enrolled' and 'attending' children do not attend school regularly. This necessitates a deeper understanding of the issue of non-participation if the goal of the universalization of elementary education is to be realized.

The present chapter is about the assessment of enrolment of students in elementary schools across different states and union-territories of our country. Not only enrolment ratio are studied but also how many of them retain till the end of class eight is also discussed. Apart from general population, the performance of scheduled castes and scheduled tribes are dealt separately. In this study we try to see to what extent gender disparity is applying against girls and in which parts of our country this disparity is more severe.

The two measures of enrolments that are taken in this study are (i) Gross enrolment Ratio (GER) and (ii) Net Enrolment Ratio (NER). Gross enrolment Ratio (GER) is the ratio of children enrolled in class I-V \ class VI to VIII to the total population of children in the age group of 6-11 year or 11-14 years respectively. While net enrolment ratio (NER) is the ratio of children enrolled in class I-V \ class VI to VIII in the age group of 6-11/11-14 year to the total population of that particular age group.

Gross Enrolment Ratio = $(\text{Total enrolment in class I-V \ VI-VIII}) \div (\text{Population of age group 6-11 \ 11-14}) * 100$

Net Enrolment Ratio = {Total enrolment in class I-V \ VI-VIII (in age-group of 6-11\11-14)} / {Population of age-group 6-11\11-14 years} * 100

3.2 SECONDARY DATA ON EDUCATION

There has been spectacular growth in elementary education in India during the post-Independence period. Enrolments in primary education have increased from 1.9 crores in 1950-51 to 12.2 crores in 2002-03, and those in upper primary education by nearly 15 times from 31 lakhs to 4.7 crores. In all, the enrolments in elementary education-primary and upper primary, both of which together constitute the constitutional goal of universal elementary education have increased by more than seven times from 2.2 crores in 1950-51 to 16.9 crores in 2002-03. But enrolment ratio and retention rate are still lower than expected.

Unfortunately data on enrolments in India are subject to serious problems. There are wide differences between the data on enrolments provided by the ministry of human resource development (MHRD) and the National Council of Educational Research and Training (NCERT) on one hand and by Census, National Sample Survey Organization (NSSO) and other surveys such as by National Council of Applied Economic Research (NCAER 1994) and International Institute of Population Studies (IIPS 93, 2004) on the other, is well known. According to B.G. Tilak, the differences are accounted by 2 factors:

- (i) MHRD/NCERT figures generally refers to gross enrolment (unadjusted for over and under aged children) in schools, while NSSO/Census and other survey refer to net (exclusive of over and under aged children); and
- (ii) Higher enrolments reported by MHRD/NCERT as against supposed near correct enrolment NSSO, census, etc.

It is also important to note that Census/NSSO and other surveys fail to make any distinction between 'enrolment' and 'attendance' (Tilak, 2005), while MHRD/NCERT take note of it, but concentrate more on enrolment in the context of planning education in general. Census and NSSO give data only to the limited number of school educational variables while All India Educational Survey conducted by NCERT give us the most extensive wide range of school educational data in India. In addition to enrolment, number of schools and teachers, infrastructure facilities available in schools, availability of other ancillary facilities, information on a number

of other variables is collected in the survey conducted by NCERT. Like the MHRD publication, the NCERT educational data are also based on complete enumeration and are supposed to have covered all the recognized educational institution at the school level. This extensive All India Educational Survey data collected by NCERT is also reliable and used for research work and future planning.

The all India educational data is reliable data provided by National Council of Educational Research and Training. The enrolments data provided by MHRD is generally tends to be inflated and higher than that of NCERT. There are many possible reasons responsible for the discrepancy in educational data of MHRD. Predominantly, the reasons may be administrative in nature. (Mehta, 1995). Coverage, error of management, lack of understanding and uniformity of definitions, absence of an effective minority agency, different dates of references and lack of qualified and trained staff may be some of the probable reasons of discrepancy.

3.3 REGIONAL DISPARITY IN ELEMENTARY SCHOOL ENROLMENT

There has been significant progress in educational arena in the nineties. This is mainly continuation of earlier trends, but there are also signs of a perceptible acceleration in the progress of literary and school attendance in the younger age groups in the nineties, compared with earlier decades. Fairly convincing evidence in that direction is available from the National Sample Survey as well as from the second round of the National Family Health survey, 1998-99. It is encouraging for instance, to find that school attendance in the 6-14 age group has risen to nearly 80 percent, according to NFHS-II. Also noteworthy is the narrowing of gender gaps in school attendance, driven by a comparatively rapid increase in female school participation. This narrowing reflects, first and premost, a major increase in female school participation in the educationally backward states, which is another positive development. But these positive developments are happening not without regional disparity. There are some states, which are doing very well while some are lagging behind. The gender disparity is also acting differently in different parts of our country. In some states, there is quite better gender parity while in others it is against female and in few states acting against male. So, regional disparity persists in India in school enrolment, which we would discuss later.

3.3.1 Gross Enrolment Ratio (GER) in India

The gross enrolment ratio in India is quite high in primary schools mainly because of overage and underage children's enrolment in primary schools. In rural areas children used to get enrolled in government primary schools easily because of very low admission fee and little children could not be devoted to other economic activities. Parents also wanted to get free of their child responsibility for few hours. These factors are validated by the gross enrolment ratio in primary school, which is near about 90 percent. This ratio has gone down during sixth all India educational survey 1993 but again it rises up to more than 90 percent. In upper primary schools, the gross enrolment ratio is much below 60 percent in 2002. It has increased from 48 percent in 1986(5th AIES) to 58 percent in 2002. (7th AIES), So only 10 percent increase has happened during 16 years period which show poor performance in upper primary school section.

3.3.1.1 Primary Schools

According to the fifth All India Educational Survey 1986, majority of states and union territories have gross enrolment ratio above 90 percent in primary schools except few like Bihar (79), Chandigarh (81), Haryana (81), Jammu & Kashmir (80), Rajasthan (80), Uttar Pradesh (69), and West Bengal (79). These are all among the educationally backward states and union territories excluding Chandigarh. In some states and union territories of India, the gross enrolment ratio is even higher than 120%. This shows the higher magnitude of underage and overage children enrolled in primary schools. Some of the higher figures are accounted by Daman & Diu (157), Goa (133), Lakshadweep (145), Sikkim (128) etc.

During the sixth All India Educational Survey, the gross enrolment ratio for India has gone down a little bit. The national figure was 82 percent. Some of states and Union Territories below national average are Andhra Pradesh, Bihar (63), Haryana (78), Jammu & Kashmir (63), Nagaland (76), Rajasthan (75), Uttar Pradesh (63) etc. Andhra Pradesh and Nagaland are new entrants. While less number have gross enrolment above 100 percent. Andaman & Nicobar Islands, Goa, Lakshadweep, Mizoram, Pondicherry etc. are few examples.

During 2002 (7th AIES), the gross enrolment ratio again shoots up to 93 percent. Apart from some smaller states and union territories Gujarat, Karnataka, Maharashtra, Tamil Nadu, Himachal Pradesh, Orissa, West Bengal etc. have gross

enrolment ratio above hundred percent. Bihar, Assam, Punjab, Haryana, Jammu & Kashmir etc.

TABLE 3.1
STATEWISE GROSS ENROLMENT RATIO IN ELEMENTARY SCHOOLS
IN INDIA, 1986

STATE/UTs	PRIMARY				UPPER PRIMARY			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	104	80	92	0.21	44	25	35	0.30
Andaman & Nicobar	98	86	92	0.11	86	78	84	0.07
Arunachal Pradesh	111	78	95	0.29	42	27	34	0.23
Assam	98	81	90	0.15	50	39	45	0.14
Bihar	105	53	79	0.49	43	16	30	0.50
Chandigarh	81	79	81	0.02	72	76	74	-0.04
D and N Haveli	137	107	123	0.28	51	36	44	0.19
Daman and Diu	165	149	157	0.21	109	85	97	0.21
Delhi	93	90	92	0.03	80	79	80	0.01
Goa	139	127	133	0.12	110	96	103	0.12
Gujarat	120	95	108	0.22	65	44	55	0.23
Haryana	96	78	87	0.16	76	40	59	0.39
Himachal Pradesh	106	93	99	0.11	93	65	79	0.26
Jammu & Kashmir	91	67	80	0.22	70	42	57	0.31
Karnataka	118	99	108	0.17	61	42	51	0.22
Kerala	107	105	106	0.02	88	88	88	0.00
Lakshadweep	151	139	145	0.13	98	77	88	0.19
Madhya Pradesh	116	76	97	0.35	63	24	44	0.53
Maharashtra	126	107	117	0.17	78	52	65	0.26
Manipur	100	87	94	0.11	68	53	60	0.15
Meghalaya	110	107	109	0.03	54	49	51	0.06
Mizoram	126	118	123	0.07	57	57	57	0.00
Nagaland	111	104	108	0.06	46	37	42	0.12
Orissa	110	82	96	0.25	51	30	40	0.29
Pondicherry	122	126	119	-0.04	86	72	80	0.13
Punjab	97	93	95	0.03	65	54	60	0.11
Rajasthan	104	51	80	0.50	59	16	39	0.68
Sikkim	139	116	128	0.22	61	51	56	0.11
Tamil Nadu	126	120	123	0.06	85	63	74	0.21
Tripura	135	113	124	0.20	66	50	58	0.17
Uttar Pradesh	86	50	69	0.35	56	23	41	0.48
West Bengal	87	70	79	0.16	49	32	41	0.23
INDIA	105	78	92	0.24	60	35	48	0.31
C.V.	0.17	0.26	0.20	0.76	0.28	0.44	0.33	0.76

Source: Calculated from Fifth All India Educational Survey, 1986, NCERT.

have below national average. So, on an average there are a few states and union territories, which have gross enrolment ratio always above 100 percent, while there

are a few states in northern India, where gross enrolment ratio are always below national average.

TABLE 3.2
STATEWISE GROSS ENROLMENT RATIO IN ELEMENTARY SCHOOLS
IN INDIA, 1993

STATE/UTs	PRIMARY				UPPER PRIMARY			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	81	70	76	0.10	49	36	43	0.18
Andaman & Nicobar	117	108	113	0.08	88	83	86	0.04
Arunachal Pradesh	110	89	100	0.18	59	44	52	0.17
Assam	93	80	86	0.12	61	52	56	0.10
Bihar	77	47	63	0.31	41	21	32	0.34
Chandigarh	87	86	87	0.01	85	89	87	-0.04
D and N Haveli	117	80	99	0.33	61	38	50	0.27
Daman and Diu	111	103	107	0.07	91	78	84	0.11
Delhi	99	104	101	-0.04	96	97	96	-0.01
Goa	114	108	111	0.05	101	91	96	0.09
Gujarat	111	95	104	0.14	75	58	67	0.17
Haryana	79	75	78	0.04	67	54	61	0.13
Himachal Pradesh	112	106	109	0.05	95	81	88	0.12
Jammu & Kashmir	73	54	63	0.19	60	41	51	0.22
Karnataka	107	93	100	0.12	66	52	59	0.15
Kerala	99	96	97	0.03	97	95	96	0.02
Lakshadweep	131	120	126	0.10	103	92	98	0.10
Madhya Pradesh	99	77	89	0.19	65	39	53	0.30
Maharashtra	99	91	95	0.07	73	61	67	0.12
Manipur	119	108	113	0.10	82	73	78	0.08
Meghalaya	104	106	105	-0.02	55	53	54	0.02
Mizoram	128	115	121	0.12	70	66	68	0.04
Nagaland	78	74	76	0.03	43	43	43	-0.01
Orissa	105	85	95	0.17	60	41	50	0.22
Pondicherry	119	112	115	0.06	112	102	107	0.09
Punjab	86	82	84	0.04	66	60	63	0.06
Rajasthan	95	54	75	0.39	62	24	44	0.52
Sikkim	111	98	105	0.11	53	53	53	0.00
Tamil Nadu	102	98	100	0.03	91	83	87	0.07
Tripura	109	95	102	0.12	61	52	57	0.10
Uttar Pradesh	75	51	63	0.24	55	31	44	0.32
West Bengal	88	78	83	0.09	51	38	45	0.16
INDIA	90	73	82	0.15	62	45	54	0.18
C.V.	0.16	0.22	0.18	0.87	0.27	0.38	0.31	0.91

Source: Calculated from Sixth All India Educational Survey, 1993, NCERT.

TABLE 3.3

**STATEWISE GROSS ENROLMENT RATIO IN ELEMENTARY SCHOOLS
IN INDIA, 2002**

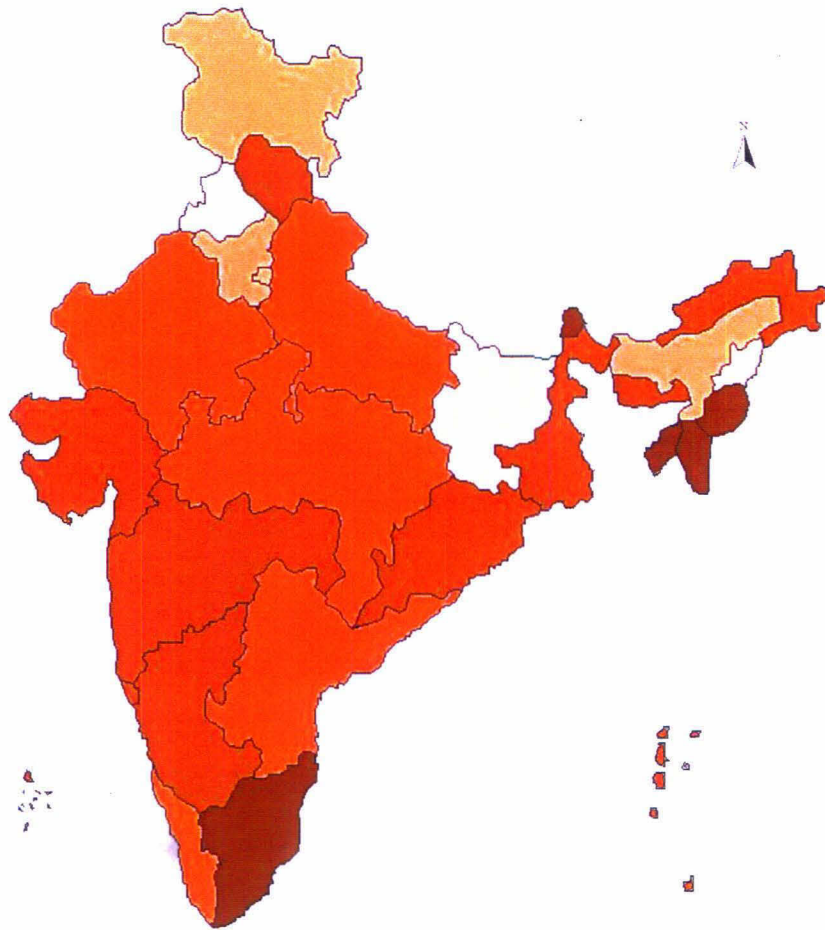
STATE/UTs	PRIMARY				UPPER PRIMARY			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	94	96	95	-0.02	64	59	62	0.05
Andaman & Nicobar	116	111	113	0.04	93	87	90	0.05
Arunachal Pradesh	108	95	102	0.11	67	58	63	0.09
Assam	87	85	86	0.02	50	49	50	0.01
Bihar	79	65	72	0.13	30	20	25	0.20
Chandigarh	70	68	69	0.02	69	71	70	-0.02
D and N Haveli	131	113	122	0.16	87	58	73	0.28
Daman and Diu	116	109	113	0.06	102	96	99	0.05
Delhi	85	88	86	-0.03	82	81	81	0.01
Goa	104	100	102	0.03	106	99	103	0.06
Gujarat	111	107	109	0.04	80	66	73	0.13
Haryana	78	78	78	0.00	67	60	64	0.07
Himachal Pradesh	112	111	112	0.01	103	97	100	0.05
Jammu & Kashmir	84	73	79	0.10	64	52	58	0.13
Karnataka	109	107	108	0.02	73	68	71	0.05
Kerala	97	97	97	0.00	96	92	94	0.03
Lakshadweep	112	99	105	0.11	105	91	98	0.12
Madhya Pradesh	97	91	94	0.05	71	53	62	0.18
Maharashtra	103	102	103	0.01	83	79	82	0.04
Manipur	128	126	127	0.02	66	67	66	-0.01
Meghalaya	109	114	112	-0.04	47	53	50	-0.07
Mizoram	126	121	123	0.05	75	75	75	0.00
Nagaland	59	58	59	0.01	30	31	31	-0.02
Orissa	104	98	101	0.05	59	50	55	0.10
Pondicherry	115	113	114	0.02	118	113	115	0.04
Punjab	66	71	68	-0.05	55	58	56	-0.03
Rajasthan	99	91	95	0.07	67	40	54	0.30
Sikkim	113	116	114	-0.03	58	64	61	-0.06
Tamil Nadu	116	114	115	0.02	98	95	97	0.03
Tripura	122	116	119	0.05	69	65	67	0.04
Uttar Pradesh	90	87	89	0.03	50	41	46	0.11
West Bengal	100	101	104	-0.01	58	54	56	0.04
INDIA	95	91	93	0.03	62	54	58	0.08
C.V.	0.18	0.18	0.18	1.50	0.30	0.32	0.30	1.33

Source: Calculated from Seventh All India Educational Survey, 2002, NCERT.

The regional disparity has decreased from fifth all India educational survey to the sixth one as evident from coefficient of variation. But after 1993, the CV remains

Map no. 3.1

GROSS ENROLMENT RATIO IN PRIMARY SCHOOLS IN INDIA, 2002



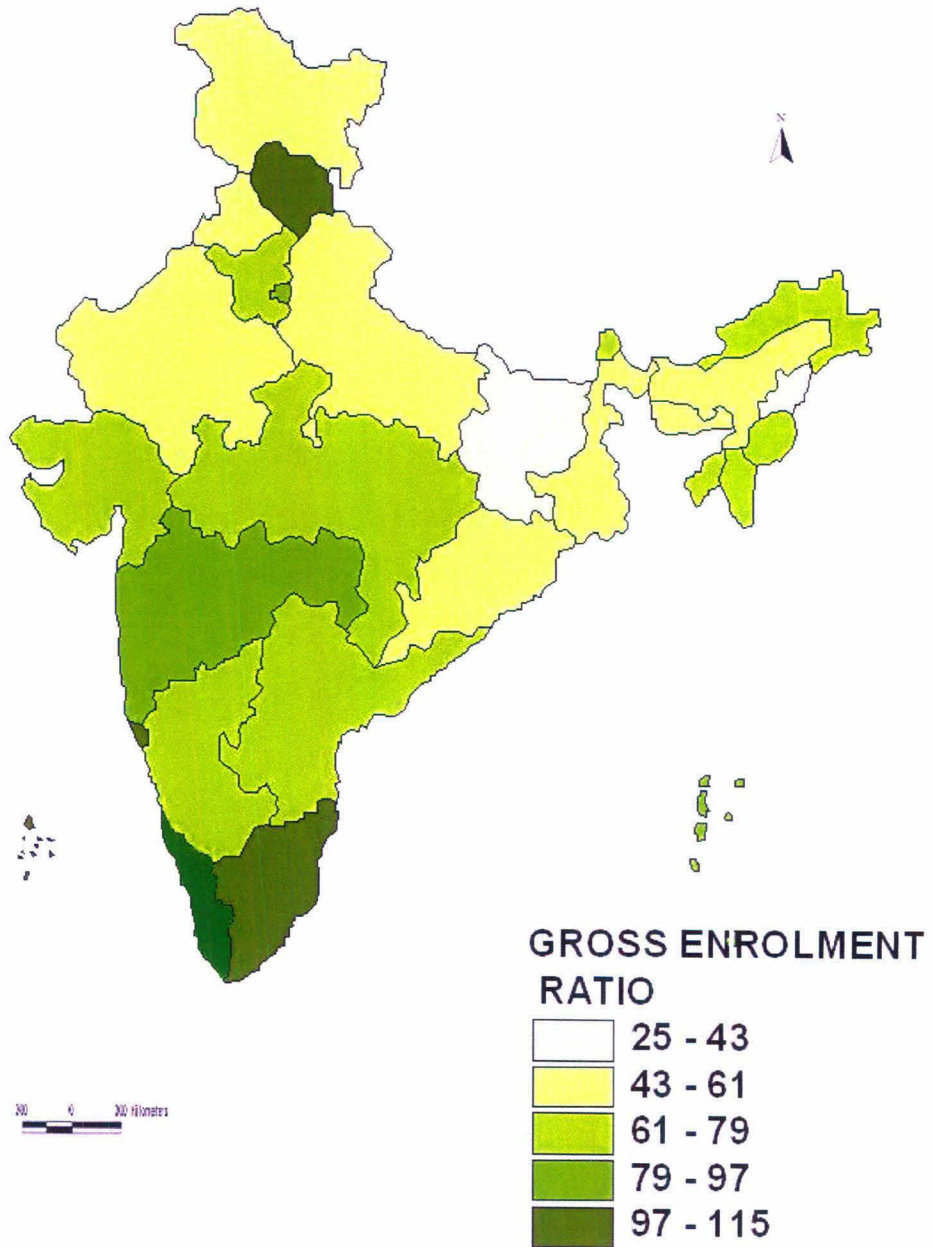
0 100 200 Kilometers

GROSS ENROLMENT RATIO

White	59 - 72
Light Orange	73 - 86
Orange	87 - 99
Dark Orange	100 - 113
Dark Red	114 - 127

Map no.3.2

GROSS ENROLMENT RATIO IN UPPER PRIMARY SCHOOLS IN INDIA, 2002



constant, which shows that regional disparity has maintained at the same level from 1993 to 2002, no improvement has taken place.

3.3.1.2 Upper-Primary Schools

The gross enrolment ratio in upper primary school gets reduced to about half of primary schools enrolment. This is mainly due to large-scale dropouts, discontinuance of students as they shifted from primary school to upper primary section. According to fifth All India Educational Survey (1986), the gross enrolment ratio for India was only 48 percent. This shows the real achievements in the area of school education. From 1986 to 1993, it rises 6 percent points to 54 and again rises to 58 during seventh all India educational surveys. So, the growth in upper primary gross enrolment ratio is also not remarkable. This is one of the black sides of our educational front performance.

During 1986, majority of states and union territories have gross enrolment ratio below 60 percent. Some of the poorest performers are Andhra Pradesh (35), Arunachal Pradesh (35), Bihar (30), Rajasthan (39), UP (41), West Bengal (41) etc. These states have also done poor in primary school enrolment. Smaller states and union territories barring northeastern states are performing well along with Himachal Pradesh, Tamil Nadu, Kerala etc. We have already seen how in these states and union territories, the infrastructure facilities are in good condition and now they are also enrolling higher percentage of students in their schools. One of the northern states, Himachal Pradesh has gross enrolment ratio of 79 in upper primary school and it has increased from one survey to another. In 2002, the gross enrolment ratio is 100 percent. This is one of the sides of social sector developments of Himachal Pradesh. Many researchers and thinkers called it another revolution after telecom and electricity in Himachal Pradesh.

During sixth survey (1993), the conditions have improved a little bit. Apart from smaller states and union-territories and few southern states, some northeastern states have also shown good sign. Andhra Pradesh, Bihar, Nagaland, Rajasthan, Uttar Pradesh and West Bengal are worst performer as happened in 1986.

In 2002 at the beginning of new century, our condition improves marginally. But pattern of good and bad performers remain constant. Bihar, Nagaland and Uttar Pradesh have recorded gross enrolment ratio in upper primary schools below 50 percent. In Punjab and Bihar, the gross enrolment ratio has gone down over

the 9 years interval. Goa, Himachal Pradesh and Pondicherry have crossed the limit of 100 percent. Among the larger states only Kerala and Tamil Nadu have gross enrolment ratio above 90 percent.

The regional disparity regarding enrolment has marginally reduced from 1986 to 1993. But after 1993, it remained constant as indicated from coefficient of variation. This is mainly because of slow progress in the northern and northeastern states and better or rapid performance by smaller states and union territories and some southern states.

3.3.1.3 Gender Disparity in Gross Enrolment Ratio in Elementary Schools

(a) Primary Schools

In Primary schools, the gross enrolment ratio of boys is higher than girls in all states and union territories of India barring a few. The lower enrolment of girls is because of many reasons, which we would discuss, in next chapter. Among the major reasons are lower status of women in the society and deployment of girls in household and economic activities instead of getting them enrolled in schools. Gender disparity is being calculated by modified Sofer's index formula.

In 1986, in all states and union territories of India, the gross enrolment ratio of boys is higher than state average while that of girls is below the average. In Bihar and Rajasthan, we could see the worst kind of gender disparity. The gross enrolment of girls in these two states is only half of that of boys. Other worst performers who have gender disparity above national average are Arunachal Pradesh, Dadra and Nagar Haveli, Madhya Pradesh, Orissa and Uttar Pradesh. The gender disparity index at National level is 0.24, i.e. gross enrolment of girls is only about 76 percent of that of boys. This itself is a high figure showing our biases towards education of girl children. In some states and union territories like Chandigarh, Delhi, Meghalaya, Mizoram, Nagaland, Pondicherry, Punjab, Kerala and Tamil Nadu recorded the lowest gender disparity against girls.

During sixth All India Educational Survey (1993), the gender disparity against girl has gone down significantly. Still Bihar, Dadra & Nagar Haveli, Rajasthan, Uttar Pradesh, Arunachal Pradesh, Madhya Pradesh are worst performer. A lot of states and union territories have improved their figures.

In 2002, India recorded the least gender disparity against girl child in gross enrolment ratio in primary schools. Even Uttar Pradesh, Rajasthan, Madhya

Pradesh improved their conditions by large margins. Dadra and Nagar Haveli is the worst performer.

From the table, we can observe that gender disparity against girl in gross enrolment ratio is going down from one survey to another. Nonetheless, the value of gender disparity is itself very high. But regional disparity regarding gender disparity against girls is not going down. The regional disparity has gone up from 1986 to 2002 as evident from coefficient of variation. It is a matter of great concern, which needs to be addressed urgently.

(b) Upper primary schools

In upper primary, the gross enrolment ratio of boys is much higher than girls in majority of states and union territories. In 1986 in all states and union territories of India, the gross enrolment ratio of boys is higher than state average while that of girls is below the average. In Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan, we could observe the severe kind of gender disparity against girls. The gross enrolment ratio of girls in these states is less than half of that of boys. Other worst performers above national average are Haryana and Jammu & Kashmir. Since the larger northern states have higher gender disparity against girls, it pushes national average to such high value. Otherwise majority of states and union territories have lower gender disparity than national average. Nevertheless, the national average is also very high. In some states and union territories like Chandigarh, Delhi, Kerala, Meghalaya, Mizoram, recorded the lowest gender disparity against girls. In Chandigarh the disparity is acting against boys. In Tamil Nadu, which shows very small disparity against girls in primary schools has recorded high in upper schools. This is happening in other states and union territories also. Generally girls attain their puberty during 10-11 years of age. So, for the social safety of family of girls or out of fear that girls could bring social stigma to the family in society, the mobility of girls outside the house is restricted. Even in rural households, girls are pulled out from schools and employed in household activities. This led to the very low gross enrolment ratio in upper primary schools.

During sixth all India Educational Survey (1993), the gender disparity against girl child has gone down significantly. Still Bihar, Dadra & Nagar Haveli, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh are worst performer with gender disparity above national average. A majority of states and

union territories have improved their condition over 1986. Nagaland and Pondicherry have experienced disparity against boys slightly.

In 2002, India recorded the least gender disparity in gross enrolment ratio in upper primary schools. But this figure is even higher than that of primary school. Even poorly performing northern states have improved their condition by large percentage points. Nevertheless, Rajasthan is the worst performer having highest gender disparity.

From the data, we can observe that gender disparity against girls in gross enrolment ratio is going down from one survey to another. But regional disparity regarding gender disparity as evident in case of primary school is not gone down. The regional disparity has gone up from 1986 to 2002 as evident from coefficient of variation which went up from 0.76 to 1.33 during the same time period. This situation is mainly because of poor performances of northern states and better performance by southern and northeastern states, and union territories.

3.3.2 Net Enrolment Ratio in India

The net enrolment ratio is one of the best indicators to assess the enrolment in primary and upper primary schools. The net enrolment ratio for the age group 6 to below 11 years is the percentage of enrolment in class I-V in the age group 6 to below 11 years to the child population in the same age group. The net enrolment ratio for upper primary schools is the percentage of the enrolment in class VI-VIII in the age group 11 to below 14 years to the child population in the same age group. The net enrolment ratio in both primary and upper primary schools is lower than gross enrolment ratio. This is due to the removal of underage and over aged children while calculating net enrolment ratio.

3.3.2.1 Net Enrolment Ratio in Primary and Upper Primary schools

In primary schools, the net enrolment ratio is only 64 percent in 1993 (6th AIES). For the boys, it is 71 percent while it is 57 percent for girls. It means that about 36 percent of children in the age group of 6-11 years are not enrolled in primary schools in 1993. For boys this figure is only 29 percent but 43 percent of girls in the age-group of 6-11 years are not attending primary schools in India. The net enrolment ratio also varies from one state to another.

TABLE 3.4

STATEWISE NET ENROLMENT RATIO IN ELEMENTARY SCHOOLS IN
INDIA, 1993

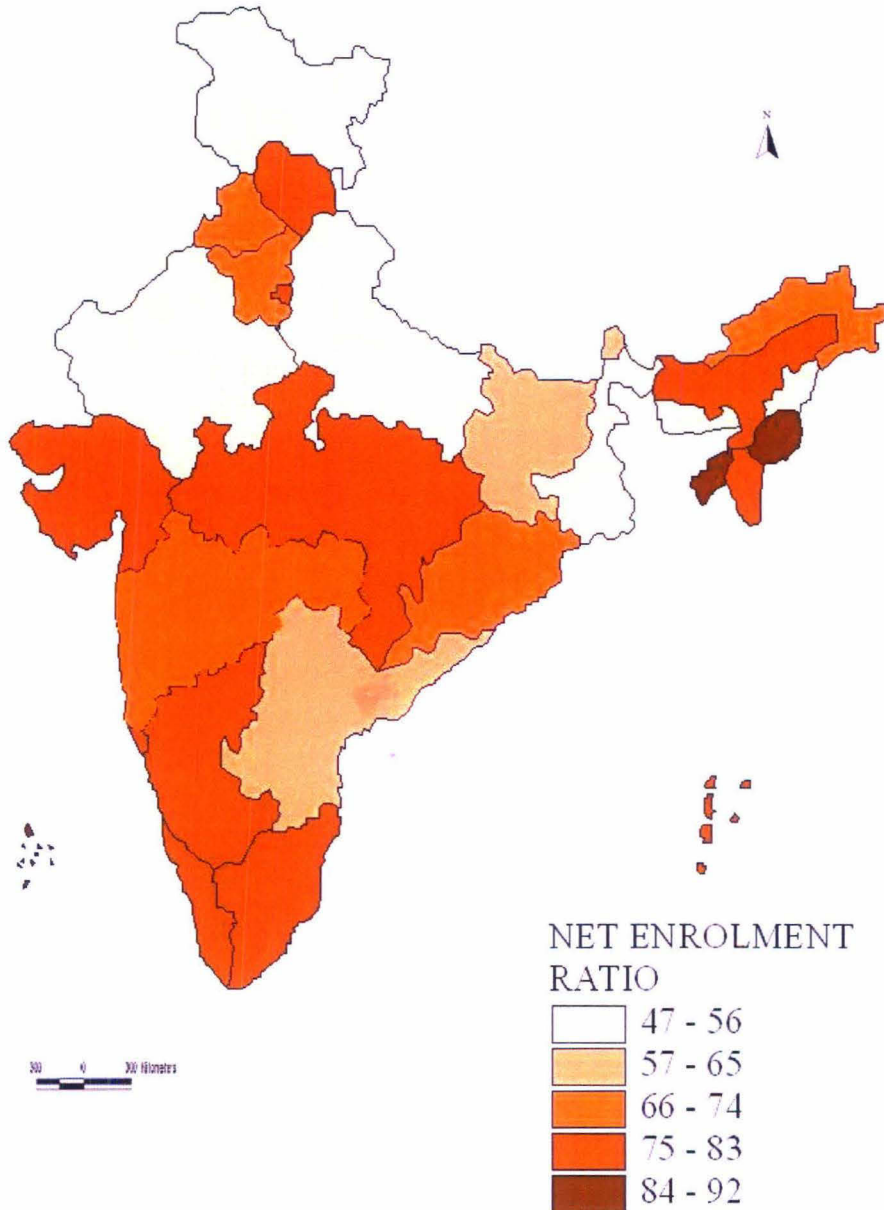
STATE/UTs	PRIMARY				UPPER PRIMARY			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	63	54	58	0.09	35	25	30	0.17
Andaman & Nicobar	85	81	83	0.04	54	53	54	0.01
Arunachal Pradesh	78	64	71	0.13	44	33	39	0.15
Assam	84	72	78	0.11	47	40	44	0.09
Bihar	77	47	63	0.31	41	21	32	0.34
Chandigarh	66	65	66	0.01	66	71	68	-0.05
D and N Haveli	84	61	72	0.22	36	26	31	0.17
Daman and Diu	82	79	80	0.03	57	47	52	0.11
Delhi	75	78	77	-0.03	82	82	82	0.00
Goa	80	77	79	0.03	58	56	57	0.02
Gujarat	81	71	76	0.09	62	50	56	0.13
Haryana	69	66	68	0.03	55	45	50	0.12
Himachal Pradesh	84	80	82	0.04	68	60	64	0.08
Jammu & Kashmir	60	44	52	0.18	56	39	48	0.21
Karnataka	83	73	78	0.09	54	43	49	0.13
Kerala	79	76	77	0.03	83	81	82	0.02
Lakshadweep	90	85	88	0.04	52	57	54	-0.05
Madhya Pradesh	85	68	76	0.16	47	26	37	0.31
Maharashtra	73	68	71	0.05	51	44	48	0.08
Manipur	93	87	90	0.05	72	63	67	0.09
Meghalaya	55	57	56	-0.02	28	28	28	0.00
Mizoram	81	74	77	0.06	43	43	43	0.00
Nagaland	48	46	47	0.02	25	26	26	-0.02
Orissa	81	64	73	0.16	52	35	44	0.22
Pondicherry	94	88	91	0.05	90	84	87	0.05
Punjab	74	71	73	0.03	56	53	55	0.04
Rajasthan	71	39	56	0.36	49	20	35	0.47
Sikkim	61	53	57	0.09	21	21	21	0.00
Tamil Nadu	80	76	78	0.04	91	83	87	0.07
Tripura	97	87	92	0.09	52	44	48	0.09
Uttar Pradesh	56	38	48	0.22	51	28	41	0.31
West Bengal	53	47	50	0.07	35	27	31	0.13
INDIA	71	57	64	0.14	51	37	45	0.18
C.V.	0.16	0.22	0.18	1.00	0.32	0.43	0.37	1.10

Source: Calculated from Sixth All India Educational Survey, 1993, NCERT.

Some of the states and union territories, having net enrolment ratio above 80 percent are Andaman & Nicobar Islands (83) Daman & Diu (80), Himachal Pradesh (80), Lakshadweep (88), Manipur (90) Pondicherry (91) and Tripura (92).

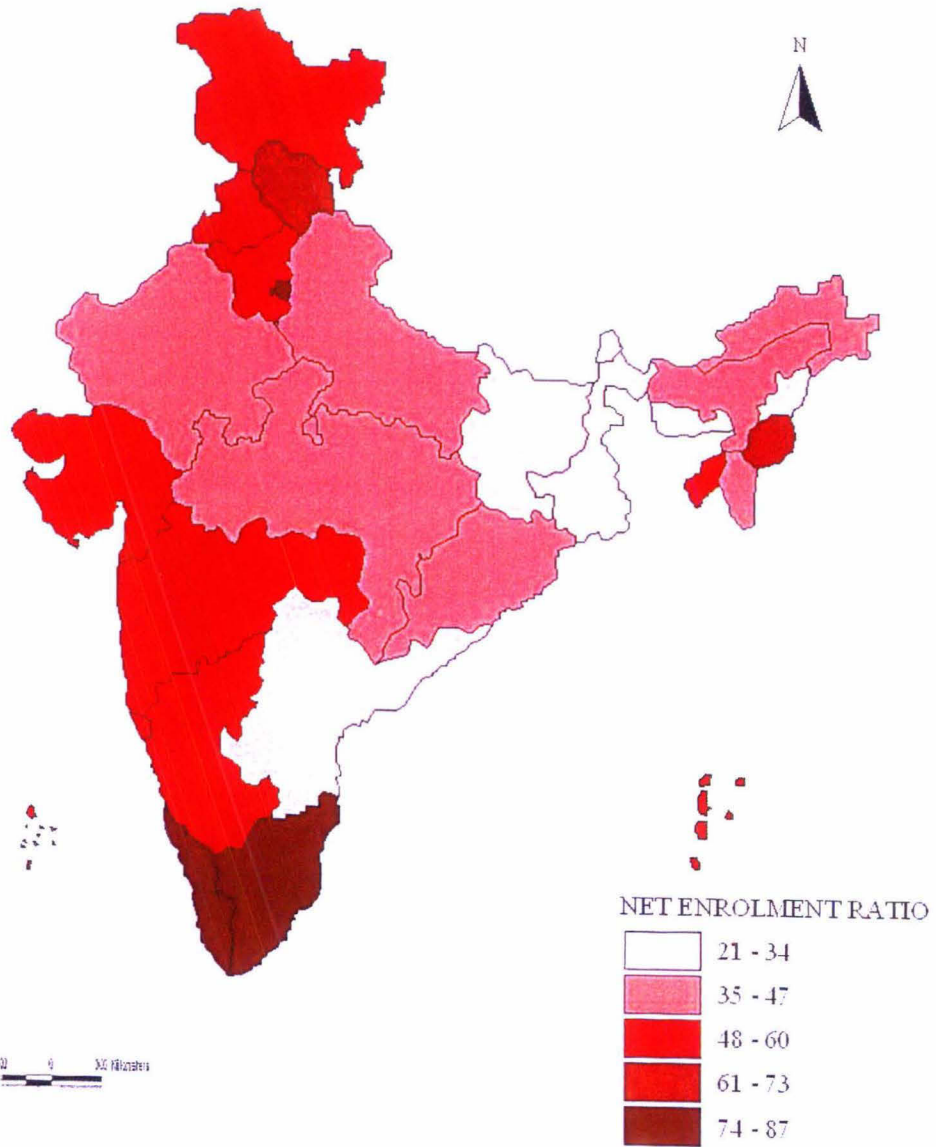
Map no. 3.3

NET ENROLMENT RATIO IN PRIMARY SCHOOLS IN INDIA, 1993



Map no.3.4

NET ENROLMENT RATIO IN UPPER PRIMARY SCHOOLS IN INDIA, 1993



Those below national average of 64 are Andhra Pradesh (50), Bihar (63), Jammu & Kashmir (52), Meghalaya (56), Nagaland (47), Rajasthan (56), Sikkim (57), Uttar Pradesh (48) and West Bengal (50). So, Nagaland is the worst performer followed by Uttar Pradesh and West Bengal.

In upper primary schools, the net enrolment ratio is much lower. According to sixth All India Educational Survey, the net enrolment ratio for India is only 45 percent. This means that about 55 percent of children in the age groups of 11-14 years are out of upper primary schools. This figure is exorbitantly high and shows the poor conditions of our elementary education in the country. It must be near about zero for the successful completion of elementary education by our children. The gross enrolment ratio for boys is 51 percent while for girls it is 37 percent. So, about 50 percent of boys but 63 percent of girls are not enrolled in upper primary schools in the age group of 11-14 years. Among states and union territories, the net enrolment ratio varies widely.

Some of the states and union territories, having net enrolment ratio in upper primary above 60 percent are Chandigarh (68), Delhi (82), Himachal Pradesh (64), Kerala (82), Manipur (67), Pondicherry (87) and Tamil Nadu (87). Chandigarh, Pondicherry and Delhi are urban centers having large number of private schools and people have better economic conditions leading to high net enrolment in upper primary schools. Kerala and Tamil Nadu are among the socially developed states of India having large expenditure on social sectors. These two are also the states, which have started different types of welfare measures for school students very early than other states. Manipur and Himachal Pradesh are new entrants. In Manipur and Himachal Pradesh because of large expenditure on elementary education and efficient monitoring work, the education sector is working well.

Those states and union territories having net enrolment ratio below national average of 45 in their upper primary schools are Andhra Pradesh (30), Arunachal Pradesh (37), Bihar (32), Dadra & Nagar Haveli (31), Madhya Pradesh (37), Meghalaya (28), Nagaland (26), Rajasthan (35), Sikkim (21), Uttar Pradesh (41) and West Bengal (31). Sikkim is the worst performer followed by Nagaland.

The regional disparity is much higher in upper primary schools than in primary schools. In comparison with gross enrolment ratio, the regional disparity in net enrolment ratio is same in primary schools but higher in upper primary sections. Even regional disparity regarding girls net enrolment ratios is higher than boys. These

regional disparities need to be rectified particularly in upper primary schools and girls enrolment.

3.3.2.2 Gender Disparity in Net Enrolment Ratio in India

Gender disparity is working against girl children all over India barring a few union territories where it is working against boys. This gender disparity is high in upper primary schools than in primary schools. In comparison of gross enrolment ratio, the gender disparity in net enrolment ratio is slightly lower in primary schools and constant in upper primary schools.

In primary schools, where gender disparity is above national average of 0.14 are Bihar, Dadra & Nagar Haveli, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh. These states cover about 40 percent of total population of India. Since in these states, we are experiencing higher gender disparity, that's why at national level the figure is also high. Some of the states and union territories having gender disparity very low are Chandigarh, Daman & Diu, Delhi, Goa, Haryana, Kerala, Meghalaya, Nagaland, Punjab, Andaman & Nicobar Islands, Himachal Pradesh etc.

In upper primary schools, at national level, the value of gender disparity index is 0.18. There are many states and union territories, where gender disparity is above national average. They are Bihar, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh. Some are experiencing very low gender disparity. They are Andaman & Nicobar Islands, Delhi, Goa, Kerala, Meghalaya, Mizoram, Sikkim etc. The inter state variation in gender disparity is higher in upper primary schools than in primary schools.

3.4 ENROLMENT OF SCHEDULED CASTES AND SCHEDULED TRIBES IN ELEMENTARY EDUCATION

About three-fourth of the out of school children in the country are girls, and also a substantial percentage of them belong to scheduled castes and scheduled tribes. The core strategy of achieving universal elementary (UEE) education will be the education of these children. It is felt that if the issues of UEE relating to girls and SC/ST children are addressed, all other issues will automatically get resolved. Studies have shown that in addition to social disparity and exclusion, there were also economic reasons, which weighed against universal participation in schooling of a

large number of children, particularly girls belonging to SCs/STs and other such groups. In order to attract such children to schools and also to convince their parents of the value of education, a number of incentive schemes were launched at different periods of time during the last few decades. Broadly these incentives were in the form of provisioning of mid-day meals to children in schools, supply of free textbooks, free uniforms, scholarship etc.

Special attention to the educational needs of SCs and STs is a national commitment, pursued in all the five-year plans. In many states, the progress with respect to enrolment and participation of children belonging to these sections has been quite satisfactory. However, statistics reveal that the objectives of equity are still elusive in many parts of the country. Considering that the SC/ST population is not homogenous in all respects, the endeavour would be to refine the identification of target groups even among the SC/STs and identify particular sub-groups, which are seriously handicapped and require greater attention. This identification may be done through micro-planning activities.

During the past few years, tribal education has witnessed a rapid transformation, particularly in the area of access, pedagogic reform and community participation. Much emphasis has been given to the improvement of access in tribal areas through the schemes of non-formal education (NFE), alternative schools, community schools and Educational Guarantee schemes, both under DPEP and outside it. However, there are still habitations in the tribal – dominated districts, which remain unserved by primary educational facilities.

3.4.1 Scheduled Castes Enrolment

Scheduled castes are those communities in our society who are facing social discrimination through ages. Social exclusion from the society, untouchability, religious and cultural degradation etc. are some of the worst kind of discrimination they are facing through ages. Taking into account their problems, the government has taken various measures for their upliftment on social, economic and educational front. Special programmes are initiated for it. Special programmes are also initiated for their educational development including schools education. In this section, we try to analyse the condition of scheduled castes regarding enrolment in elementary schools in comparison with total population in selected states where their population is more than 5 percent of total population. For this purpose, we have

calculated index of social equity for both primary and upper primary schools. The index of social equity is calculated by dividing the share of SC/ST enrolment in total enrolment in elementary schools by their share in total population multiply by 100.

(a) Primary Schools

In primary schools of India, the enrolment of scheduled castes is in proportion of their share in total population in 1986 as suggested by social equity index (109). It may be possible that some underage and overage children are enrolled in primary schools. In 1993, this risen up to 119, which is a positive sign.

In 1986, all the selected states have social equity index above 100 barring Bihar, Rajasthan and Uttar Pradesh. Maharashtra recorded the highest social equity index of 169 followed by Assam. In Maharashtra, the social and religious movements for the upliftment of downtrodden have started very early in comparison with other parts of the country. Along with these movements, the stress was also laid on the educational development of untouchables and women. Because of these reasons, the Scheduled castes of Maharashtra are comparatively more developed on educational front than other parts of India. The enrolment of girls of scheduled castes community in Maharashtra is also comparable to their counterpart in total population at least upto elementary stage. The scheduled castes in Chandigarh, Gujarat, Madhya Pradesh, Andhra Pradesh Punjab etc. are more enrolled in primary schools in proportion to their share in total population. In the states of Gujarat, Andhra Pradesh, Punjab, the political awareness among scheduled castes is also very high and they are so more concern about the education of their children. In Bihar, Rajasthan and UP, the conditions of scheduled castes are worse, which is also seen in the case of enrolment. The discrimination against girl child is more intense in these states.

In 1993, the conditions of scheduled castes have improved slightly. The social equity index at national level is found to be 119. Assam tops the list followed by Jammu & Kashmir, Tamil Nadu, Maharashtra etc. Rajasthan is at the bottom of the list followed by Himachal Pradesh, Bihar etc. Only Rajasthan has social equity index below 100.

From 1986 to 1993, the inter-state regional disparity has gone down as evident from coefficient of variation, which has gone down from 21 percent to 12 percent. It is a positive sign.

TABLE 3.5

**STATEWISE SCHEDULED CASTES ENROLMENT IN ELEMENTARY
SCHOOLS IN INDIA 1986**

STATE/UTs	% of SC Population in total Population 1981	% of SC enrolment in total Enrolment in primary school	% of SC enrolment in total Enrolment in upper primary School	Index of Social Equity in primary school	Index of Social Equity Upper primary school
Andhra Pradesh	14.87	18.94	15.96	127	107
Assam	6.24	10.57	9.4	169	151
Bihar	14.51	12.16	9.42	84	65
Chandigarh	14.09	20.61	14.77	146	105
Delhi	18.03	21.2	16.4	118	91
Gujarat	7.15	9.34	9.61	131	134
Haryana	19.07	21.15	14.38	111	75
Himachal Pradesh	24.62	24.58	19.65	100	80
Jammu & Kashmir	8.31	8.69	8.39	105	101
Karnataka	15.07	15.81	12.8	105	85
Kerala	10.02	11.26	13.1	112	131
Madhya Pradesh	14.1	18.44	17.31	131	123
Maharashtra	7.14	13.86	13.36	194	187
Orissa	14.66	17.26	12.01	118	82
Pondicherry	15.99	17.43	14.99	109	94
Punjab	26.87	32.43	22.82	121	85
Rajasthan	17.04	16.74	13.39	98	79
Sikkim	5.78	6.43	4.53	111	78
Tamil Nadu	18.35	20.18	18.69	110	102
Tripura	15.12	17.7	15.39	117	102
Uttar Pradesh	21.16	20.08	16.77	95	79
West Bengal	21.99	24.8	18.82	113	86
INDIA	15.75	17.12	14.69	109	93
C.V.				0.21	0.29

Source: Calculated from Fifth All India educational survey, 1986, NCERT.

(b) Upper Primary Schools

In the upper primary schools of India, the enrolment of scheduled castes is not in proportion of their share in total population in 1986 as suggested by social equity index (93). It might be possible that some underage and overage children are enrolled in upper primary schools. So, actual number of children in the age group of 11-14 years enrolled in upper primary schools seems to be low. In 1993, this rises up to 94 by only 1 percent points.

TABLE 3.6

**STATEWISE SCHEDULED CASTES ENROLMENT IN ELEMENTARY
SCHOOLS IN INDIA 1993**

STATE/UTs	% of SC Population in total Population 1991	% of SC enrolment in total Enrolment in Primary school	% of SC enrolment in total Enrolment in Upper Primary school	Index of Social Equity in Primary school	Index of Social Equity Upper primary school
Andhra Pradesh	15.93	20.24	15.69	127	98
Assam	7.4	11.85	12.78	160	173
Bihar	14.55	15.65	10.02	108	69
Chandigarh	16.51	23.46	17.12	142	104
Delhi	19.05	21	15.9	110	83
Gujarat	7.41	9.18	9.33	124	126
Haryana	19.75	24.49	15.84	124	80
Himachal Pradesh	25.34	26.75	20.43	106	81
Jammu & Kashmir	8.31	11.56	10.79	139	130
Karnataka	16.38	19.08	14.75	116	90
Kerala	9.92	11.27	11.22	114	113
Madhya Pradesh	14.55	16.38	14.39	113	99
Maharashtra	11.09	14.77	13.44	133	121
Orissa	16.2	20.48	15.01	126	93
Pondicherry	16.25	20.37	18.71	125	115
Punjab	28.31	34.83	24.84	123	88
Rajasthan	17.29	16.55	13.46	96	78
Sikkim	5.93	6.692	4.65	113	78
Tamil Nadu	19.18	26.56	23.35	138	122
Tripura	16.36	19.24	17.17	118	105
Uttar Pradesh	21.05	26.81	18.27	127	87
West Bengal	23.62	28.52	20.23	121	86
INDIA	16.48	19.62	15.56	119	94
C.V.				0.12	0.24

Source: Calculated from Sixth All India Educational Survey, 1993, NCERT.

In 1986, majority of the selected states have social equity index below 100 barring a few states. Maharashtra again tops the list followed by Assam, Chandigarh, Gujarat, Kerala etc. This is the same pattern what we have seen in case of primary schools. The enrolment of scheduled castes in upper primary schools in Maharashtra is double of their share in total population of the state. The enrolment of girls of scheduled castes in Maharashtra is only 3 percent points lower than their counterpart in total population. The lowest performer is Bihar (65) followed by Haryana, Sikkim, Rajasthan, Uttar Pradesh etc. From this we can conclude that as we

go from primary to upper primary level, the social equity index goes on decreasing. In the northern states of Bihar, UP, Haryana, Rajasthan, the children of scheduled castes are more marginalized. Madhya Pradesh, another northern states, is performing well in comparison with other BIMARU states. The discrimination against girl child in scheduled caste community is more intense in BIMARU states.

In 1993, the conditions of scheduled castes do not improve in comparison to 1986. Assam tops the list followed by Jammu & Kashmir, Gujarat, Tamil Nadu, Maharashtra etc. The worst performer is Bihar followed by Rajasthan, Sikkim, Haryana, Himachal Pradesh etc. In the both the case of primary and upper primary schools, the regional disparity has gone from 1986 to 1993 as suggested by coefficient of variation.

3.4.2 Enrolment of Scheduled Tribes

Scheduled tribes are those communities in society who are facing physical isolation from the society. They are concentrated in few pockets in different parts of the country. In this section, we try to analyse the conditions of scheduled tribes regarding enrolment in elementary schools in comparison with total population in selected states. For this purpose, we have calculated index of social equity for both primary and upper primary school enrolment.

(a) Primary schools

In primary schools of India, the enrolment of scheduled tribes is in proportion of their share in total population in 1986 as suggested by social equity index (101). It also includes some underage and overage children enrolled in primary schools. So, all the primary schools going children in the age group of 11-14 years might not be enrolled in primary schools. In 1993, it raises upto 112, which is a good sign.

In 1986, about half of the selected states have social equity index above 100. Assam recorded the highest social equity index of 133 followed by Manipur, Uttar Pradesh, Nagaland etc. Assam, there is a strong territorial and community level integrity among tribes. Because of local self government and decentralization of elementary education, these tribal also manage their affairs by own. The Christian missionaries are also participating in education sector in a big way. Because of these reasons the social equity index of scheduled tribes in

Northeastern states is above 100 percent. In better developed states of Gujarat and Kerala also, the social equity index for scheduled tribes is above 100. Karnataka recorded the lowest social equity index of 72 followed by Andaman & Nicobar Islands, Madhya Pradesh, Himachal Pradesh, Orissa etc. In Karnataka, the scheduled tribes population are basically concerned in the backward regions of Malabar coast and north Karnataka. Because of their economic backwardness and physical isolation in these regions, the enrolment of scheduled castes in primary schools is so low. The same case is also applied to Andaman & Nicobar Islands, Madhya Pradesh, Himachal, Orissa etc where physical isolation, poverty, lack of awareness among scheduled tribes population, weak initiatives from state governments determine the enrolment of scheduled tribe children in primary schools. Because of all these reasons, the social equity index in these states is below 100. Even Bihar has social equity index above 100. The majority of scheduled tribes population are concentrated in Jharkhand. In Jharkhand, Christian missionaries are engaged in a big way for the cause of educational improvement of scheduled tribal population.

In 1993, the condition of scheduled tribes has improved little bit. The social equity index at national level is found to be 112. Assam, Uttar Pradesh, Kerala etc tops the list. Madhya Pradesh is at the bottom of the list followed by Andaman & Nicobar Islands, Rajasthan, Sikkim, Orissa etc. The regional disparity has gone up from 1986 to 1993.

(b) Upper Primary Schools

In the upper primary schools of India, the enrolment of scheduled tribes is not in proportion of their share in total population in 1986 as suggested by social equity index (66). This lower social equity index value also includes underage and overage children enrolled in upper primary schools. So, the actual number of children in the age group of 11-14 years enrolled in upper primary schools seems to be low. In 1993, this rises up to 72 by 6 percent points.

TABLE 3.7

**STATEWISE SCHEDULED TRIBES ENROLMENT IN ELEMENTARY
SCHOOLS IN INDIA 1986**

STATE\UTs	% of ST Population in tot Population 1981	% of ST enrolment in total Enrolment in Primary school	% of ST enrolment in total Enrolment Upper Primary school	Index of Social Equity in Primary school	Index of Social Equity in Upper Primary school
Andhra Pradesh	5.93	5.76	3.37	97	57
Andaman & Nicobar	11.85	9.09	9.57	77	81
Arunachal Pradesh	69.82	74.41	75.93	107	109
Assam	10.99	14.58	13.18	133	120
Bihar	8.31	8.52	6.79	103	82
D and N Haveli	78.82	82.15	70.43	104	89
Gujarat	14.22	14.47	11.05	102	78
Himachal Pradesh	4.61	3.89	3.05	84	66
Karnataka	4.91	3.52	2.99	72	61
Kerala	1.03	1.13	0.77	110	75
Lakshadweep	93.82	96.29	92.2	103	98
Madhya Pradesh	22.97	18.53	12.49	81	54
Maharashtra	9.19	9.13	5.78	99	63
Manipur	27.3	33.63	22.29	123	82
Meghalaya	80.58	91.11	89.22	113	111
Mizoram	93.55	100	100	107	107
Nagaland	83.99	97.98	97.18	117	116
Orissa	22.43	18.52	10.13	83	45
Rajasthan	12.21	10.52	8.45	86	69
Sikkim	23.27	21.26	20.36	91	87
Tamil Nadu	1.07	0.95	0.62	89	58
Tripura	28.44	28.8	20.84	101	73
Uttar Pradesh	0.21	0.25	0.2	119	95
West Bengal	5.63	5.05	3.33	90	59
INDIA	7.76	7.84	5.12	101	66
C.V.				0.15	0.26

Source: Calculated from Fifth All India Educational Survey, 1986, NCERT.

In 1986, majority of the selected states, have social equity index below 100 barring a few. Those states having social equity index above 100 are Arunachal Pradesh, Assam, Meghalaya, Mizoram and Nagaland in Assam tops the list with social equity index of 120. There are all northeastern states with high concentration of scheduled tribes and government is spending a large proportion of budget on school education as we have already seen. The Christian missionaries are also operating in a big way in these states. These all factors lead to high enrolment of

scheduled tribe children in upper Primary schools. Other northeastern states have also high social equity index. The gender discrimination in these northeastern states is also low barring Arunachal Pradesh.

TABLE 3.8

STATEWISE SCHEDULED TRIBES ENROLMENT IN ELEMENTARY SCHOOLS IN INDIA 1993

STATE/UTs	% of ST Population in total Population 1991	% of ST Enrolment in total Enrolment in Primary school	% of ST Enrolment in total Enrolment in Upper Primary school	Index of social Equity in Primary school	Index of social Equity in Upper Primary school
Andhra Pradesh	6.31	7.51	3.77	119	60
Andaman & Nicobar	9.54	8.1	8.25	85	86
Arunachal Pradesh	63.66	72.42	66.49	114	104
Assam	12.82	19.05	18.1	149	141
Bihar	7.66	8.96	6.72	117	88
D and N Haveli	78.99	81.23	70.91	103	90
Daman and Diu	11.54	13.88	12.39	120	107
Gujarat	14.92	16.04	11.59	108	78
Himachal Pradesh	4.22	4.27	3.72	101	88
Karnataka	4.26	5.98	4.37	140	103
Kerala	1.1	1.33	0.97	121	88
Lakshadweep	93.15	98.35	96.5	106	104
Madhya Pradesh	23.27	19.17	13.15	82	57
Maharashtra	9.27	10.81	7.08	117	76
Manipur	34.41	40.11	28.11	117	82
Meghalaya	85.53	91.96	87.1	108	102
Mizoram	94.75	99.44	99.26	105	105
Nagaland	87.7	97.25	97.02	111	111
Orissa	22.21	20.26	11.14	91	50
Rajasthan	12.44	10.95	7.84	88	63
Sikkim	22.36	19.83	20.61	89	92
Tamil Nadu	1.03	1.3	0.53	126	51
Tripura	30.95	32.25	24.53	104	79
Uttar Pradesh	0.21	0.45	0.36	214	171
West Bengal	5.59	5.12	3.03	92	54
INDIA	8.08	9.08	5.85	112	72
C.V.				0.24	0.31

Source: Calculated from Sixth All India Educational Survey, 1993, NCERT.

The lower performer is Orissa (45) followed by Madhya Pradesh, Andhra Pradesh, West Bengal etc. In these states, the absolute number of scheduled tribes population is high and they are settled in the plateau and forested areas. Also

due to poor governance in these states, the lights of education have not been reached to a large section of population.

In 1993, the condition of scheduled tribes has improved slightly in comparison to 1986. Assam again tops the list of social equity index followed by Nagaland, Daman & Diu, Mizoram etc. The worst performer is Orissa followed by Tamil Nadu, West Bengal, Madhya Pradesh, Andhra Pradesh etc. The pattern of 1986 remained the same in 1993. The regional disparity as happened in case of primary schools has gone up also in upper primary schools. This is because of better performers of smaller states and poor enrolment of scheduled tribes children in larger states.

3.5 RETENTION IN ELEMENTARY EDUCATION

Universal elementary education includes not only universal enrolment, but also universal retention and universal achievement (Tilak, 2006). The retention rate of the school system in India is at a very low level. Out of every 100 children enrolled in class I, about 47 reach Grade VIII and 37 Grade X, according to the rates of drop out estimated for 2002-03. Universalization of elementary education, a goal set by the constitution to be achieved within a ten-year period after the constitution was framed, still eludes and remains as the most conspicuous failure of the Indian education system. The National Policy on Education 1986 resolved that by 1995, all children would be provided free and compulsory education up to 14 years of age. Now according to the Sarva Shiksha Abhiyan, an umbrella scheme launched by Union government in 2001, universalization of elementary education with respect to enrolment and retention will be achieved by 2010.

Our school education in India is characterized by high rate of discontinuity. Dropout indicates wastage as those who discontinue early often become functionally illiterate (Bose, 2005). A significant fall in enrolment and attendance is observed as the education ladder moves up. The highest dropout rate occurs in class I. The sixth All India Educational Survey, 1993 reported that there were 746 children in Class II per 1000 children in Class I. Often, the dropout is a sequence of absence from school for short or long periods. The eighth five year plan (1992-7) targeted to reduce the dropout rate to 20 percent between class I to V, and 40 percent between classes I to VIII. However, the achievements have been far short of the goal. In a period of four decades, the decline in dropout rate between classes I to II was 37 percent, and

between class I to VIII, 31 percent. Thus, a long distance still remains to be covered to enable the school system to retain the child in school till the elementary stage been completed.

TABLE 3.9

STATEWISE RETENTION RATE IN ELEMENTARY EDUCATION IN INDIA, 1986

UTs/states	Class V				Class VIII			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	41.38	34.36	38.28	0.10	22.81	15.04	19.38	0.20
Andaman & Nicobar	85.85	80.1	83.13	0.05	60.73	51.47	56.35	0.10
Arunachal Pradesh	31.79	27.92	30.18	0.07	18.05	13.12	16.09	0.15
Assam	39.51	34.1	37.09	0.08	22.71	19.67	21.35	0.07
Bihar	36.67	30.33	34.47	0.10	23.11	13.65	19.82	0.25
Chandigarh	75.17	73.39	74.36	0.02	64.96	66.67	65.73	-0.02
D and N Haveli	61.95	42.74	53.51	0.22	26.96	22.38	24.94	0.09
Daman and Diu	110.67	100.65	105.97	0.09	80.96	60.78	71.49	0.19
Delhi	78.57	61.29	70.51	0.17	69.3	59.85	64.89	0.09
Goa	101.36	89.36	95.44	0.10	88.9	75.06	82.08	0.12
Gujarat	55.05	45.29	50.61	0.11	35.21	23.82	30.03	0.20
Haryana	75.87	59.09	68.52	0.16	67.15	35.09	53.12	0.38
Himachal Pradesh	96.2	64.59	67.06	0.29	71.03	50.48	61.49	0.21
Jammu & Kashmir	69.04	58.42	64.59	0.11	54.91	40.26	48.77	0.18
Karnataka	52.93	41.45	47.5	0.14	33.31	23.65	28.74	0.17
Kerala	101.03	96.59	98.84	0.04	81.92	80.68	81.31	0.01
Lakshadweep	74.46	68.95	71.77	0.05	51.58	40.29	46.07	0.14
Madhya Pradesh	73.04	51.39	64.14	0.22	46.74	22.3	36.7	0.39
Maharashtra	59.79	48.77	54.67	0.12	41.91	26.33	34.67	0.24
Manipur	60.13	53.59	57	0.07	46.95	37.16	42.26	0.13
Meghalaya	21.59	22.08	22.85	-0.01	16.48	15.54	16.02	0.03
Mizoram	33.74	35.32	34.49	-0.02	16.32	17.35	16.81	-0.03
Nagaland	30.72	31.22	30.95	-0.01	17.28	16.47	16.9	0.02
Orissa	50.21	43.09	47.1	0.09	32.7	21.79	27.92	0.20
Pondicherry	86.83	79.38	83.21	0.07	75.67	54.62	65.44	0.21
Punjab	66.7	63.36	65.15	0.03	53.27	43.63	48.82	0.11
Rajasthan	30.53	20.87	27.55	0.19	21.53	11.7	18.5	0.29
Sikkim	33.92	34.67	34.26	-0.01	23.1	22.44	22.81	0.01
Tamil Nadu	71.61	63.51	67.79	0.08	46.32	34.56	40.79	0.16
Tripura	40.06	38.1	39.16	0.03	25.69	22.15	24.08	0.07
Uttar Pradesh	61.81	52.62	58.57	0.10	49.68	31.65	43.31	0.25
West Bengal	40.57	35.09	38.15	0.08	24.17	19.04	21.9	0.12
INDIA	52.55	45.06	49.4	0.09	36.03	25.35	31.55	0.18
C.V.	0.39	0.40	0.39	0.80	0.50	0.57	0.51	0.69

Source: Calculated from Fifth All India Educational Survey, 1986, NCERT.

TABLE 3.10

STATEWISE RETENTION RATE IN ELEMENTARY EDUCATION IN
INDIA, 1993

UTs/states	Class V				Class VIII			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	48.93	43.36	46.33	0.07	28.96	20.66	22	0.17
Andaman & Nicobar	79.41	79.32	79.37	0.00	56.48	53.72	55.18	0.03
Arunachal Pradesh	41.48	40.34	40.98	0.02	26.13	22.56	24.57	0.07
Assam	36.76	34.48	35.71	0.03	25.62	24.6	25.15	0.02
Bihar	41.1	34.92	38.79	0.09	23.99	15.31	20.75	0.22
Chandigarh	80.52	82.88	81.61	-0.02	76.75	81.27	78.84	-0.04
D and N Haveli	48.48	39.31	44.61	0.12	29.94	20.95	26.14	0.18
Daman and Diu	98.72	94.98	97.01	0.03	90.65	79.68	85.63	0.10
Delhi	74.43	69.01	71.78	0.05	64.57	57.53	61.12	0.07
Goa	106.26	96.81	101.7	0.08	96.58	87.61	92.26	0.08
Gujarat	69.57	61.35	65.82	0.08	47.31	36.87	42.55	0.14
Haryana	82.29	74.46	78.67	0.07	75.13	55.55	66.06	0.19
Himachal Pradesh	74.84	70.22	72.6	0.04	75.06	63.34	69.39	0.11
Jammu & Kashmir	64.79	59.07	62.31	0.06	58.45	47.16	53.54	0.13
Karnataka	63.53	54.26	59.05	0.10	40.88	30.53	35.89	0.15
Kerala	114.33	110.76	112.58	0.03	111.01	112.12	111.56	-0.01
Lakshadweep	93.99	84.26	89.32	0.09	70.52	55.84	63.48	0.15
Madhya Pradesh	64.72	56.83	61.27	0.08	38.03	24.42	32.09	0.23
Maharashtra	74.97	66.66	71	0.08	54.43	42.39	48.69	0.14
Manipur	56.5	55.1	55.84	0.02	44.64	43.67	44.18	0.01
Meghalaya	34.33	33.91	34.12	0.01	20.03	18.48	19.26	0.04
Mizoram	45.24	44.22	44.76	0.01	28.75	30.43	29.55	-0.03
Nagaland	45.71	48.32	46.95	-0.03	36.32	39.55	37.85	-0.05
Orissa	53.5	46.72	50.4	0.08	31.85	23.75	28.15	0.15
Pondicherry	110.13	109.17	109.67	0.01	89.5	84.21	86.96	0.05
Punjab	74.91	70.33	72.78	0.04	57.56	54.09	55.95	0.04
Rajasthan	37.02	26.84	33.29	0.17	26.67	15.42	22.54	0.27
Sikkim	48.09	54.4	50.98	-0.07	26.14	29.48	27.67	-0.06
Tamil Nadu	85.77	84.13	84.98	0.01	65.7	60.59	63.22	0.05
Tripura	45.49	44.16	44.88	0.02	26.7	25.36	26.08	0.03
Uttar Pradesh	51.07	43.58	48.17	0.09	39.99	29.25	35.83	0.16
West Bengal	49.41	42.45	46.14	0.09	28.3	22.26	25.46	0.12
INDIA	56.76	51.9	54.63	0.05	39.55	32.07	36.27	0.11
C.V.	0.35	0.37	0.35	1.00	0.49	0.56	0.52	0.94

Source: Calculated from Sixth All India Educational Survey, 1993, NCERT.

According to NCERT, enrolment in class II to X as percentage of enrolment in class I can be used for calculating crude dropout rate in states/UTs, and treated as crude measures of retention rate. The dropout rate can be found by

subtracting retention from 100. This indicator does not take into account repeaters. We have calculated retention rate for total population, scheduled castes, scheduled tribes from 5th, 6th and 7th all India educational survey.

TABLE 3.11

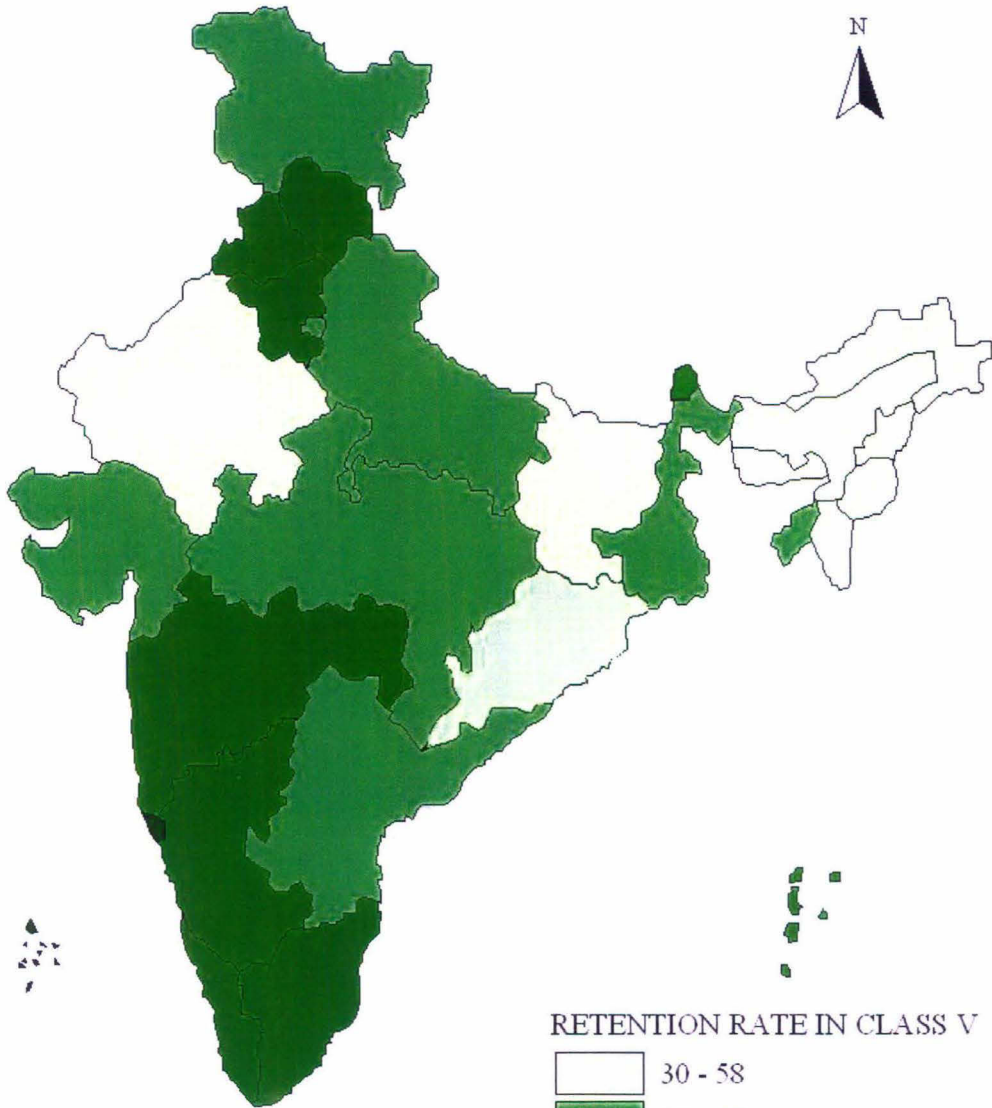
STATEWISE RETENTION RATE IN ELEMENTARY EDUCATION IN INDIA, 2002

UTs/states	Class V				Class VIII			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	81.16	78.28	79.73	0.03	50.66	42.08	46.41	0.10
Andaman & Nicobar	104.18	98.04	101.17	0.05	87.33	83.57	85.49	0.03
Arunachal Pradesh	52.54	55.76	55.15	-0.04	37.09	39.8	39.12	-0.04
Assam	41.32	39.34	40.36	0.03	29.72	29.24	29.48	0.01
Bihar	32.85	27.21	30.31	0.10	19.27	12.79	16.36	0.19
Chandigarh	100.43	103.11	101.63	-0.02	100.18	110.09	105.08	-0.09
D and N Haveli	60.82	42.49	51.77	0.21	43.88	25.09	34.6	0.29
Daman and Diu	91.96	93.92	92.88	-0.02	82.39	77.63	80.17	0.04
Delhi	89.27	83.79	86.64	0.05	84.56	80.88	82.79	0.03
Goa	146.82	141.23	144.13	0.06	147.37	139.12	143.4	0.09
Gujarat	79.69	70.75	75.48	0.08	59.7	39.16	52.33	0.24
Haryana	93.4	92.65	93.06	0.01	84.8	78.48	81.93	0.06
Himachal Pradesh	94.66	95.79	95.2	-0.01	96.66	96.52	96.59	0.00
Jammu & Kashmir	73.08	71.76	72.48	0.01	63.96	57.06	60.83	0.07
Karnataka	97.41	96.28	96.86	0.01	65.52	59.11	62.43	0.06
Kerala	108.02	103.72	105.89	0.04	123.95	115.37	119.71	0.08
Lakshadweep	127.79	120.76	124.6	0.06	146.69	128.89	136.44	0.18
Madhya Pradesh	83.72	75.39	79.74	0.08	61.84	43.34	53	0.21
Maharashtra	90.21	88.89	89.59	0.01	79.63	72.76	76.37	0.06
Manipur	49.27	47.57	48.44	0.02	37.38	37.28	37.33	0.00
Meghalaya	33.53	36.13	34.83	-0.04	20.39	22.65	21.52	-0.05
Mizoram	50.09	50.26	50.18	0.00	37.57	40.83	39.12	-0.04
Nagaland	55.86	53.75	54.85	0.02	43.81	44.7	44.28	-0.01
Orissa	60.19	55.02	57.69	0.05	40.45	33.65	37.15	0.10
Pondicherry	103.51	99.54	101.56	0.03	106.9	103.77	105.37	0.03
Punjab	89.41	95.11	92.06	-0.05	80.89	86.12	83.32	-0.05
Rajasthan	48.08	31.74	40.01	0.22	37.77	18.96	28.48	0.35
Sikkim	68.43	76.58	72	-0.08	44.94	51.78	48.3	-0.08
Tamil Nadu	89.72	89.99	89.85	0.00	75.63	77.2	76.39	-0.01
Tripura	65.96	65.14	65.57	0.01	44.28	23.92	43.23	0.32
Uttar Pradesh	86.39	48.64	68.8	0.37	35.11	27.77	31.69	0.12
West Bengal	76.4	65.8	67.36	0.10	38.14	33.8	36.01	0.06
INDIA	64.24	60.15	62.3	0.04	47.09	39.42	43.45	0.10
C.V.	0.33	0.37	0.37	1.99	0.51	0.57	0.53	1.54

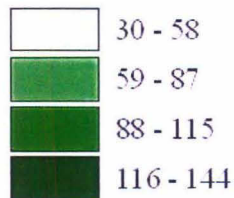
Source: Calculated from Seventh All India Educational Survey, 2002, NCERT

Map no. 3.5

RETENTION RATE IN CLASS V IN INDIA, 2002



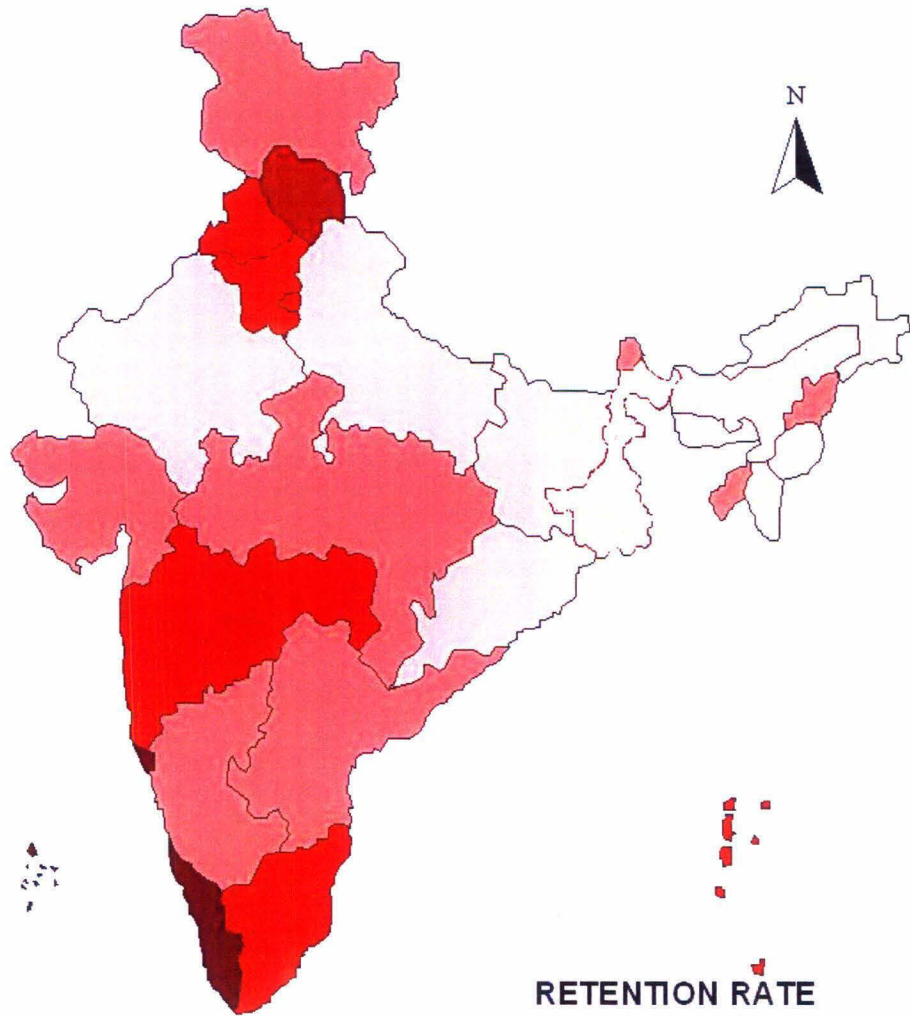
RETENTION RATE IN CLASS V



0 50 100 Kilometers

Map no. 3.6

RETENTION RATE IN CLASS VIII IN INDIA, 2002



0 10 20 Kilometers

RETENTION RATE IN CLASS VIII

16 - 41
42 - 66
67 - 92
93 - 117
118 - 143

(a) Primary schools:

According to fifth all India Educational Survey 1986, the retention rate from class I to V and class I to VII are only 49 percent and 32 percent respectively. This means that before reaching class V, about 51 percent of students enrolled in class I dropped out and 68 percent dropped out before completing the upper primary schools. This is a very high and astonishing figure. In 1993, the retention rate for primary schools rises up to 55 percent and after nine year it again rises up to 62 percent in 2002. So, in 2002 still about 38 percent of students dropped out before completing the primary stage.

In 1986, Kerala, Goa, Daman & Diu, Pondicherry and Andaman & Nicobar Island have retention rate above 80 percent in their primary schools. In Kerala above 99 percent of students complete their primary stage. The minimum retention rate is recorded by Meghalaya (22.85), followed by Rajasthan (28). In these two states, more than 72 percent of students dropped out before completing class V. In 1993, Chandigarh, Lakshadweep and Tamil Nadu also joined the elite group of states/UTs having retention rate above 80 percent. Rajasthan and Meghalaya still occupies the lowest place. In 2002, Delhi, Haryana, Punjab, Karnataka, Himachal Pradesh, Maharashtra also raises their retention rate above 80 percent in primary schools. Bihar occupies the lowest position. Because of higher growth rate of population in 1991-2001, the retention rate of Bihar goes down while increase is happening in case of Kerala. In northeastern states also the retention rates is near about 50 percent excluding Tripura.

(b) Upper Primary Schools

The retention rate in upper primary schools is lower than primary schools. In 1986, only 2 states of Kerala and Goa have retention rate above 80 percent, while seven states have retention below 20 percent. They are Arunachal Pradesh, Andhra Pradesh, Bihar, Meghalaya, Mizoram, Nagaland and Rajasthan. In 1993, all these states have improved their condition excluding Meghalaya. Daman & Diu and Pondicherry also have retention rate above 80 percent. In 2002 the same states and union territories performing better in primary schools are also performing in upper primary schools. The regional disparity in both primary and upper primary schools has remained stationary from 1986 to 2002.

3.5.1 Gender Disparity in Retention

The gender disparity in retention rate is high in upper primary schools than that of primary schools. The gender disparity has gone down from one survey to another but reduction is very gradual. In Bihar, Dadra & Nagar Haveli, Rajasthan, Madhya Pradesh, Gujarat, Uttar Pradesh, West Bengal etc the gender disparities is high in primary schools with respect to others in 2002. Andhra Pradesh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka have improved their conditions. While Uttar Pradesh, and West Bengal have deteriorated their conditions.

In case of upper primary schools, in Bihar, Dadra & Nagar Haveli, Gujarat, Madhya Pradesh, Rajasthan, Tripura and Uttar Pradesh, the gender discrimination against girls is higher than others. Andhra Pradesh, Chandigarh Haryana, Delhi, Dadra & Nagar Haveli, Daman & Diu, Orissa etc have improved their conditions a lot from one survey to another.

3.5.2 Retention Rate of Scheduled Castes

The retention rate of scheduled castes is lower than total population, which means that dropout rate is higher among scheduled castes. The retention rate of scheduled castes has risen slightly from 1986 to 1993. The dropout is higher in upper primary schools. In primary schools, more than 90 percent retention is recorded in Daman & Diu, Kerala and Pondicherry. The minimum retention rate happens to be in Bihar, Manipur, Rajasthan, West Bengal etc. Gender disparity is also happened to be higher in northern states.

In upper primary schools, Daman & Diu, Kerala and Pondicherry attain the top position. Those states and union territories where retention rate is less than 20 percent in 1993 are Bihar, Rajasthan, Sikkim and West Bengal. The gender disparity is highest in Daman & Diu followed by Rajasthan, Madhya Pradesh, Bihar etc.

The inter state regional disparity has gone up in both of primary education and upper primary section.

TABLE 3.12

**STATEWISE RETENTION RATE OF SCHEDULED CASTES IN
ELEMENTARY EDUCATION IN INDIA, 1986**

UTs\states	Class V				Class VIII			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	35.36	29.73	32.89	0.09	17.75	10.23	14.45	0.26
Arunachal Pradesh	46.77	30.76	39.47	0.23	6.45	6.73	6.58	-0.02
Assam	35.72	39.35	37.33	-0.05	23.63	20.39	22.19	0.07
Bihar	31.96	24.63	29.86	0.13	15.59	7.99	13.41	0.31
Chandigarh	77.43	69.71	74.08	0.07	52.24	38.36	46.23	0.17
D and N Haveli	98.48	61.11	78.98	0.34	69.69	23.61	45.65	0.60
Daman and Diu	85.93	97.87	90.99	-0.10	90.62	40.61	69.36	0.51
Delhi	69.55	54.45	62.26	0.15	48.35	29.22	39.11	0.27
Goa	61.15	44.13	52.74	0.19	36.51	27.6	32.11	0.14
Gujarat	58.63	48.22	54.02	0.12	42.18	26.84	35.38	0.24
Haryana	63.03	44.09	54.35	0.21	44.27	13.59	30.2	0.59
Himachal Pradesh	61.81	57.18	59.75	0.05	50.23	35.43	43.61	0.19
Jammu & Kashmir	63.75	58.65	61.62	0.05	46.98	32.84	41.07	0.19
Karnataka	39.95	27.86	34.31	0.19	25.57	15.22	20.83	0.25
Kerala	98.2	92.98	95.64	0.05	101.59	97.65	99.66	0.03
Madhya Pradesh	72.49	44.07	61.22	0.30	45.68	16.82	34.24	0.51
Maharashtra	59.13	44.11	52.24	0.17	42.1	24.63	34.09	0.28
Manipur	29.48	25.73	27.46	0.07	18.62	23.22	20.98	-0.11
Meghalaya	44.7	49.73	47.19	-0.06	35.65	23.54	29.68	0.21
Orissa	44.84	33.93	40.2	0.15	22.29	11.42	17.66	0.32
Pondicherry	78.84	71.54	75.04	0.07	56.08	30.1	42.54	0.34
Punjab	56.84	49.9	53.72	0.08	35.57	25.26	31	0.18
Rajasthan	27.08	13.03	23.33	0.35	17.13	4.41	13.74	0.62
Sikkim	31.25	29.77	30.57	0.02	13.87	14.58	14.2	-0.02
Tamil Nadu	68.62	56.54	62.91	0.12	41.14	29.15	35.48	0.18
Tripura	40.24	34.73	37.7	0.08	22.62	15.53	19.35	0.18
Uttar Pradesh	58.54	40.82	52.68	0.21	42.98	21.18	35.77	0.36
West Bengal	32.44	24.65	29.09	0.14	16.81	10.98	14.31	0.20
INDIA	47.98	37.84	43.04	0.13	30.67	18.78	25.86	0.24
C.V.	0.36	0.43	0.37	0.90	0.58	0.72	0.59	0.74

Source: Calculated from Fifth All India Educational Survey, 1986, NCERT.

TABLE 3.13

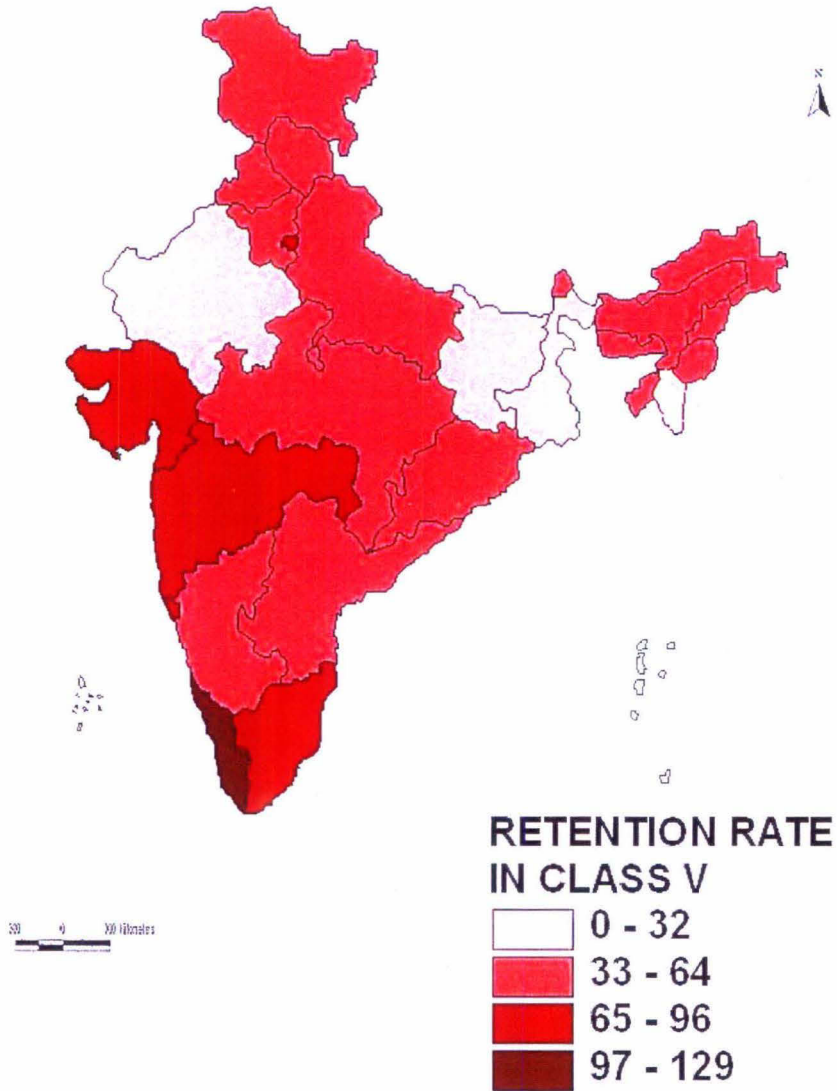
**STATEWISE RETENTION RATE OF SCHEDULED CASTES IN
ELEMENTARY EDUCATION IN INDIA, 1993**

UTs/states	Class V				Class VIII			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	40.28	32.41	36.63	0.12	19.79	12.2	16.27	0.23
Arunachal Pradesh	47.02	35.85	42.41	0.15	45.03	35.85	41.25	0.12
Assam	42.63	40.64	41.72	0.03	31.13	29.95	30.59	0.02
Bihar	31.28	22.72	28.3	0.16	13.27	6.23	10.82	0.34
Chandigarh	68.78	66.3	67.67	0.02	47.22	51.15	48.97	-0.05
D and N Haveli	64.29	77.27	70	-0.12	73.21	63.64	69	0.09
Daman and Diu	165.12	95.83	128.57	0.71	165.12	104.17	132.97	0.64
Delhi	73.75	70.3	72.13	0.03	44.31	44.04	44.18	0.00
Goa	77.26	69.25	73.34	0.07	45.71	40.92	43.36	0.06
Gujarat	73.83	64.38	69.44	0.09	54.13	35.76	45.6	0.23
Haryana	64.71	57.41	61.32	0.07	45.2	27.68	37.06	0.26
Himachal Pradesh	64.68	58.73	61.85	0.06	52.18	40.88	46.81	0.14
Jammu & Kashmir	57.14	53.19	55.35	0.04	50.67	41.03	46.31	0.12
Karnataka	49.72	36.06	43.11	0.18	29.23	17.89	23.74	0.24
Kerala	126.42	122.47	124.59	0.04	116.11	116.29	116.2	0.00
Madhya Pradesh	59.57	47.62	54.31	0.13	32.87	15.47	25.21	0.37
Maharashtra	70.45	58.34	64.61	0.12	50.23	34.69	42.73	0.20
Manipur	53.86	56.64	55.22	-0.03	50.16	39.61	45	0.13
Meghalaya	60.18	53.08	56.75	0.08	44.25	26.07	35.47	0.28
Mizoram	40	19.51	28.95	0.36	57.14	21.95	38.16	0.51
Nagaland	41.44	45.6	43.22	-0.05	29.43	28.4	28.99	0.02
Orissa	48.92	37.71	43.81	0.14	22.63	13.54	18.49	0.24
Pondicherry	112.57	127.29	119.74	-0.13	78.01	77.47	77.75	0.00
Punjab	61.47	47.06	58.35	0.16	36.95	29.54	33.52	0.12
Rajasthan	32.25	18.46	27.55	0.28	21.09	7.93	16.61	0.46
Sikkim	33.88	36.76	35.23	-0.04	13.55	15.73	14.58	-0.07
Tamil Nadu	78.5	73.85	76.25	0.04	53.24	47.49	50.45	0.07
Tripura	46.74	43.58	45.26	0.04	26.07	22.13	24.22	0.08
Uttar Pradesh	46.74	33.74	41.64	0.18	29.13	16.6	24.43	0.27
West Bengal	37.28	27.15	32.55	0.16	18.46	11.28	15.11	0.23
INDIA	49.24	41.26	45.79	0.10	29.84	21.16	26.08	0.17
C.V.	0.46	0.49	0.45	1.51	0.66	0.73	0.66	0.94

Source: Calculated from Sixth All India Educational Survey, 1993, NCERT

Map no. 3.7

RETENTION RATE OF SCHEDULED CASTES IN CLASS V IN INDIA, 1993



Map no. 3.8

RETENTION RATE OF SCHEDULED CASTES IN CLASS VIII IN INDIA, 1993

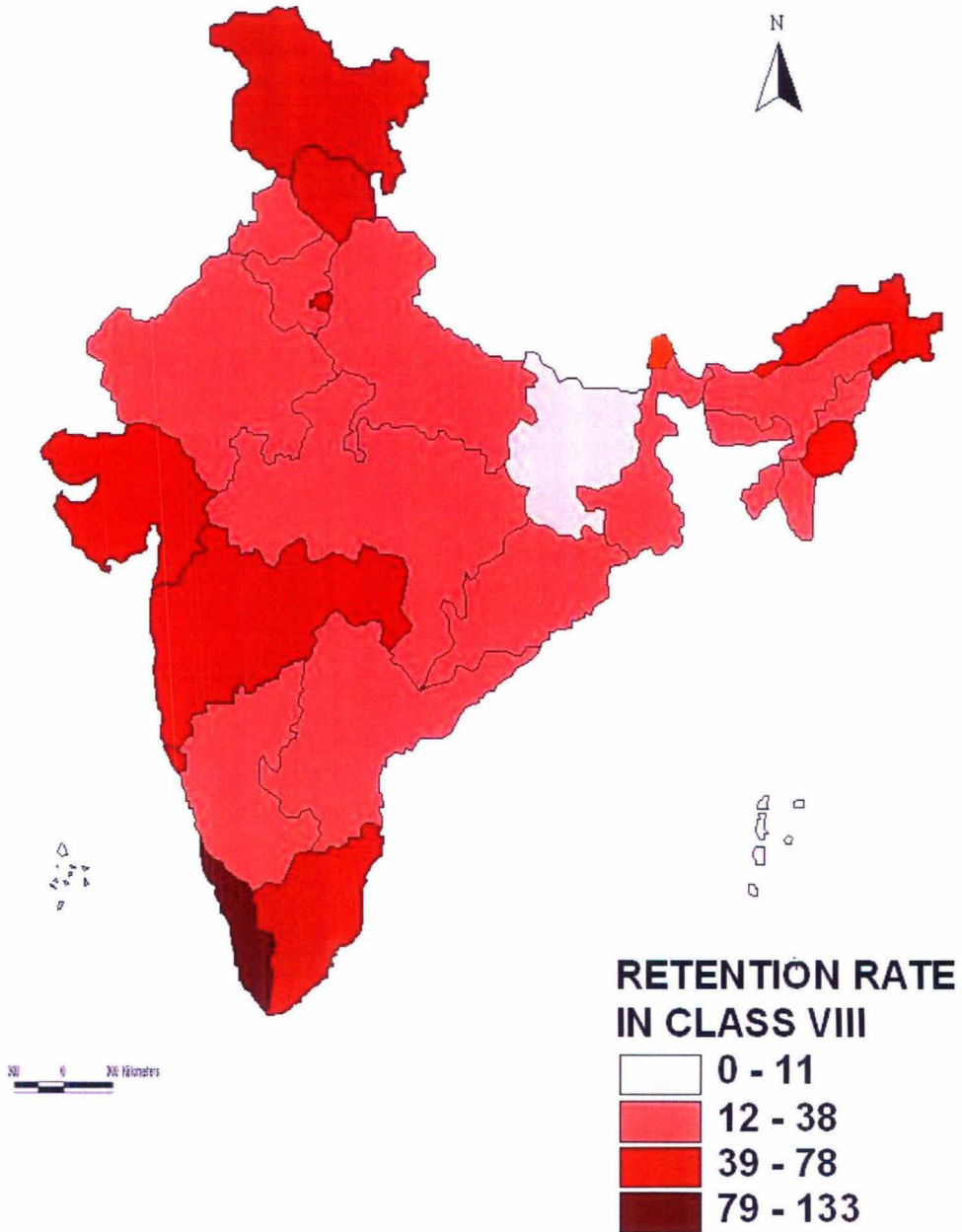


TABLE 3.14

**STATEWISE RETENTION RATE OF SCHEDULED TRIBES IN
ELEMENTARY EDUCATION IN INDIA, 1986**

UTs/states	Class V				Class VIII			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	25.09	18.26	22.43	0.15	9.88	5.19	8.06	0.29
Andaman & Nicobar	115.9	93.56	104.45	0.20	67.45	54.34	60.72	0.13
Arunachal Pradesh	28.39	29.07	28.66	-0.01	16.63	11.87	14.75	0.16
Assam	34.89	30.89	33.02	0.06	22.27	17.4	20	0.12
Bihar	31.16	22.21	27.78	0.17	15.7	10.27	13.65	0.20
D and N Haveli	55.03	33.75	45.79	0.27	22.17	16.8	19.84	0.13
Daman and Diu	67.46	68.13	67.7	-0.01	43.37	18.17	31.12	0.44
Delhi	78.81	59	69.72	0.19	45.76	34	40.36	0.16
Goa	85.71	211	123		14.28	55.55	26.66	-0.70
Gujarat	41.43	30.8	36.72	0.16	21.4	14.1	18.17	0.20
Himachal Pradesh	58	41.31	50.9	0.20	47.3	28.14	39.14	0.28
Karnataka	47.19	31.52	39.99	0.22	29.02	17.11	23.55	0.26
Kerala	70.04	71.8	70.86	-0.02	45.34	45.73	45.52	0.00
Lakshadweep	73.3	67.91	70.67	0.05	50.65	31.65	41.4	0.26
Madhya Pradesh	55.5	34.73	47.61	0.26	27.28	10.18	20.79	0.47
Maharashtra	38.94	27.88	34.15	0.17	22.99	12.66	18.52	0.28
Manipur	41.38	37.42	39.52	0.05	26.25	23.07	24.75	0.06
Meghalaya	20.26	19.72	19.2	0.01	15.94	14.68	15.31	0.04
Mizoram	33.73	35.31	34.48	-0.02	16.17	17.34	16.8	-0.03
Nagaland	30.07	30.31	30.47	0.00	17.32	16.53	16.95	0.02
Orissa	25.9	16.99	22.33	0.20	13.04	6.25	10.32	0.33
Rajasthan	20.7	7.62	17.19	0.46	15.22	3.45	12.06	0.67
Sikkim	38.06	38.7	38.36	-0.01	23.87	24.45	24.14	-0.01
Tamil Nadu	65.49	57.2	61.63	0.08	31.25	21.22	26.58	0.19
Tripura	24.51	19.69	22.43	0.11	13.45	9.21	11.62	0.17
Uttar Pradesh	53.11	35.38	46.04	0.23	38.2	18.9	30.55	0.35
West Bengal	31.68	21.07	27.43	0.20	15.57	7.02	12.14	0.37
INDIA	35.16	25.85	31.39	0.16	19.19	11.37	16.03	0.25
C.V.	0.49	0.88	0.56	0.91	0.54	0.68	0.53	1.33

Source: Calculated from Fifth All India Educational Survey, 1986, NCERT.

TABLE 3.15

**STATEWISE RETENTION RATE OF SCHEDULED TRIBES IN
ELEMENTARY EDUCATION IN INDIA, 1993**

UTs/states	Class V				Class VIII			
	Boys	Girls	Total	Gender Disparity	Boys	Girls	Total	Gender Disparity
Andhra Pradesh	23.05	16.01	20.1	0.18	10.04	4.36	7.66	0.38
Andaman & Nicobar	59.66	88.51	72.03	-0.27	54.2	57.42	55.58	-0.03
Arunachal Pradesh	37.31	36.8	37.71	0.01	22.96	19.45	21.4	0.08
Assam	31.15	27.08	29.19	0.07	21.36	18.4	19.93	0.07
Bihar	32.67	26.6	30.22	0.10	14.93	10.03	12.96	0.18
Chandigarh	14.28	25	18.18	-0.27	7.14	12.5	9.09	-0.26
D and N Haveli	44.63	32.24	39.47	0.17	24.57	16.78	21.32	0.18
Daman and Diu	88.23	114.2	99.01	-0.23	73.53	59.17	67.57	0.14
Delhi	78.05	62.94	70.32	0.14	43.14	29.21	36.01	0.21
Goa	100	66.66	82.14	0.30	153.84	60	103.57	0.89
Gujarat	50.34	40.6	45.9	0.12	28.98	20.43	25.08	0.17
Himachal Pradesh	66.74	57.87	62.48	0.09	61.79	46.62	54.31	0.17
Jammu & Kashmir	53.1	44.42	49.38	0.10	35.09	22.49	29.69	0.23
Karnataka	48.23	36.25	42.67	0.16	26.4	16.59	21.85	0.23
Kerala	97.99	100.2	99.06	-0.02	77.49	73.67	75.64	0.04
Lakshadweep	92.96	83.15	88.22	0.09	68.71	53.16	61.2	0.16
Madhya Pradesh	43.78	40.65	42.48	0.04	21.65	11.54	20.62	0.30
Maharashtra	48.05	37.09	42.95	0.14	29.27	19.06	24.52	0.21
Manipur	38.93	38.28	38.63	0.01	27.08	26.11	26.64	0.02
Meghalaya	31.96	32.43	32.19	-0.01	18.06	17.49	17.78	0.02
Mizoram	45.09	44.22	44.68	0.01	28.64	30.38	29.47	-0.03
Nagaland	45.36	47.89	46.56	-0.03	36.07	39.47	79.33	-0.05
Orissa	30.11	19.97	25.74	0.20	12.9	7.45	10.55	0.25
Rajasthan	24.51	12.24	20.52	0.33	16.26	5.93	12.9	0.46
Sikkim	44.06	60.11	51.21	-0.18	23.61	37.6	29.85	-0.24
Tamil Nadu	63.82	59.27	61.7	0.05	23.2	22.86	23.04	0.01
Tripura	31.29	27.16	29.44	0.07	16.27	13.08	14.84	0.10
Uttar Pradesh	52.73	43.32	48.82	0.11	38.6	26.6	33.62	0.19
West Bengal	31.58	19.48	26.25	0.24	15.45	7.71	12.04	0.32
INDIA	37.07	30.68	34.31	0.10	20.41	14.12	17.69	0.17
C.V.	0.46	0.54	0.47	2.51	0.83	0.69	0.73	1.41

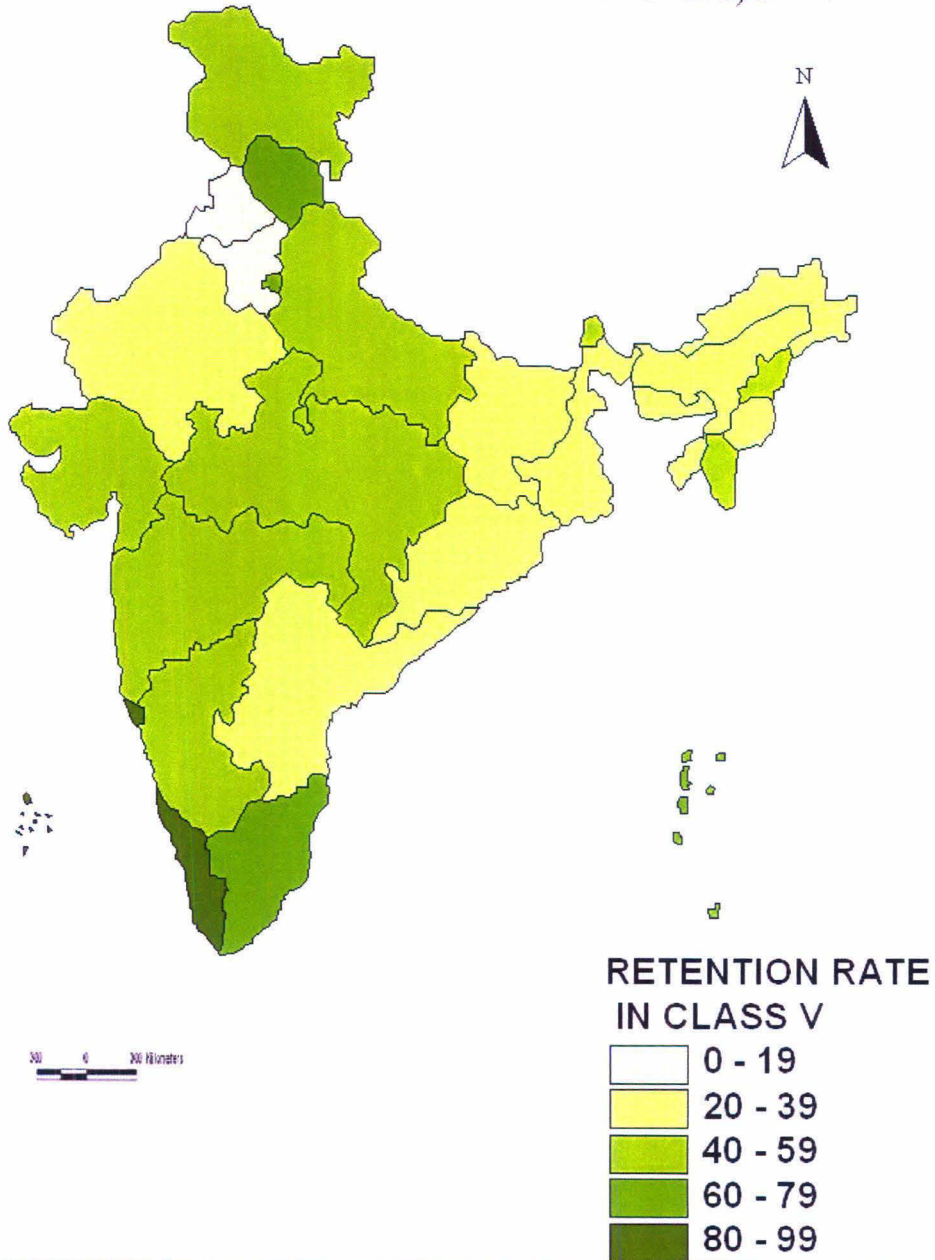
Source: Calculated from Sixth All India Educational Survey, 1993, NCERT

3.5.3 Retention rate of Scheduled Tribes

The retention rate of scheduled tribes is much lower than total population and scheduled castes. In 1993, about 65 percent of child population enrolled in Class I dropped out before completing class V and about 82 percent dropped out before class VIII. The retention rate of scheduled tribes has risen slightly

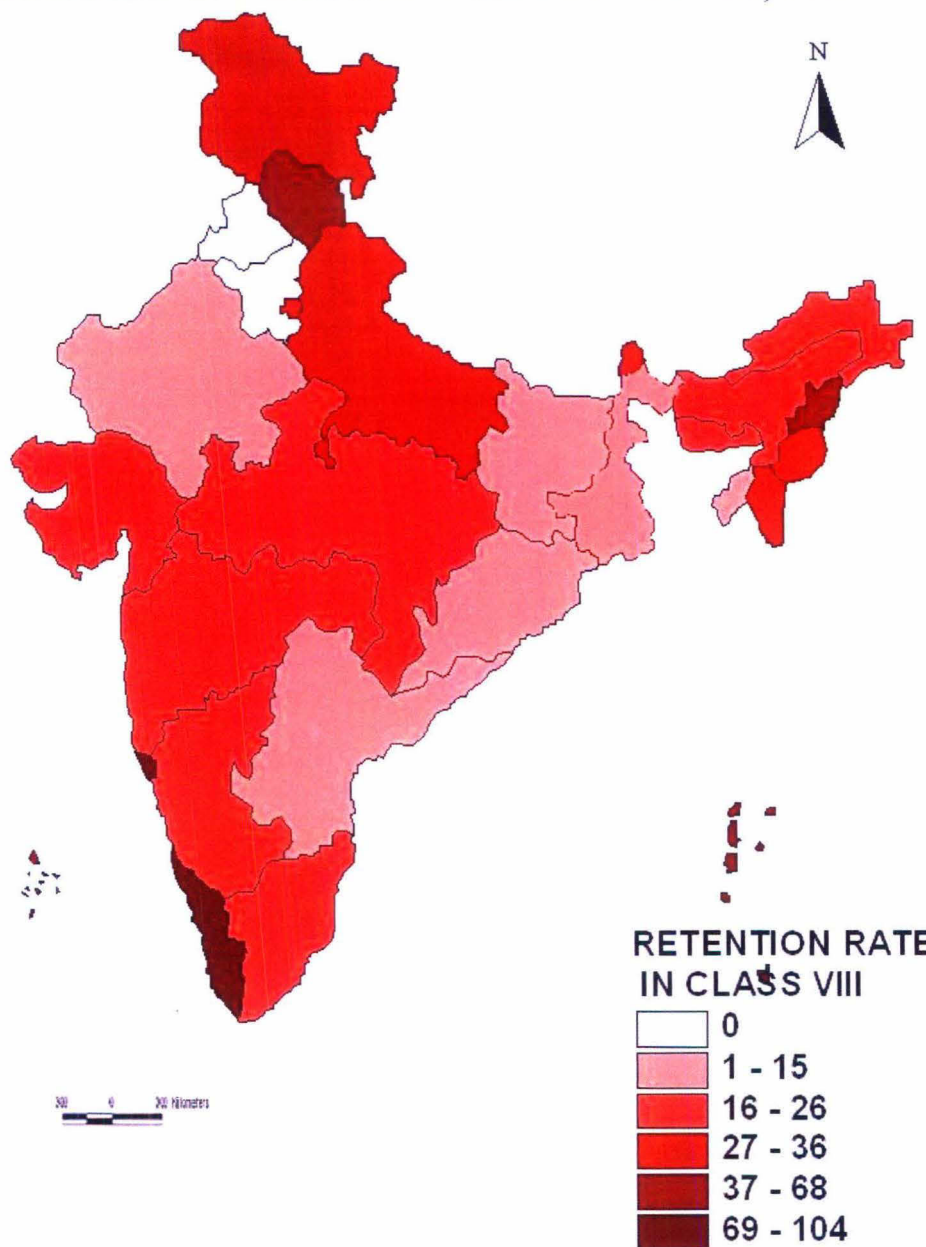
Map no. 3.9

RETENTION RATE OF SCHEDULED TRIBES IN CLASS V IN INDIA, 1993



Map no. 3.10

RETENTION RATE OF SCHEDULED TRIBES IN CLASS VIII IN INDIA, 1993



from 1986 to 1993. In primary schools more than 80 percent retention is recorded in only four states and union territories in 1993. They are Daman & Diu Goa, Kerala and Lakshadweep. The minimum retention is found in Chandigarh followed by Rajasthan.

In upper primary schools only Goa has retention rate above 80 percent in 1993. The lowest retention rate is found in Chandigarh (9) followed Rajasthan (12.9) The gender disparity is higher in Andhra Pradesh, Goa, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, West Bengal etc. In Chandigarh, Andaman & Nicobar Islands, Nagaland, Sikkim etc the disparity is against boys.

The inter state regional disparity has gone down in case of primary education but in case of upper primary education it has gone up.

3.6 CONCLUSION

The gross enrolment ratio of India is maintained at 90 for primary and 60 for upper Primary schools. This figure is not increasing which is a matter of great concern. This high gross enrolment ratio also contains overage and underage students in elementary school. When these are excluded we get net enrolment rate. The net enrolment ratio is much lower than gross enrolment ratio. These enrolment ratios are in favour of boys. But disparity against girls has gone down from one to survey but regional disparity has become somehow constant.

The enrolment of scheduled castes in primary schools is greater than that of total population but not so in upper primary schools. The condition of scheduled tribes is also the same. The gender disparity in these marginalized sections of society is much greater. The regional disparity in case of social equity index for scheduled castes has gone down but reverse is true for scheduled tribes.

The condition of retention rate in primary and upper primary school is much poor. It is 62 percent and 43 percent respectively in 2002. The regional disparity is also constant over the different surveys. The condition of scheduled caste and scheduled tribes children is much poor. The regional disparity is increasing in case of scheduled caste retention. In all these, gender discrimination is against girls child but it is going down over different surveys.

CHAPTER FOUR

FINANCING ELEMENTARY EDUCATION IN INDIA

4.1 INTRODUCTION

The government of India recognized the importance of education from the very beginning and given a high priority to education for development, as reflected in the very first Five-Year Plan. As given in the National Policy on Education 1968, education is an investment and is indeed a 'crucial' investment. (National Policy on Education, 1986).

The period after India's independence witnessed rapid expansion of education in terms of enrolments of students, number of institutions, and teachers. The educational explosion that has taken place in India during the post-independence period in terms of number of students, schools and colleges, and teachers, is also reflected in the growth of public expenditure on education (atleast in current prices). According to Jandhyala B.G. Tilak, the growth in public expenditure on education could be regarded as one important factor that contributed to educational explosion. But are the funds provided for education adequate? The level of financing education in an economy can be judged in terms of sufficiency, equity and competence.

In the 1960s international comparisons were the fashion and investment in education in any economy was used to be judged in terms of international comparison particularly with reference to the share of education in GNP and in government budget.¹ According to B.G. Tilak "Though the international comparison stills continue to be important, later adequacy of the financial reasons is judged in terms of physical targets. Enrolment (ratios) target were taken as the yardstick. Universal Primary education was begun to be considered as essential, and it was felt that resources should be provided adequately to meet this goal. Provision of schools accessible to all population, reduction in dropouts, repetition etc. have been viewed as important criteria in determining the level of finances for education." Particularly since the beginning of the 1980s equity considerations, besides consideration for quantities expansion (e.g. provisions of schools), and improvement in quality (e.g. increasing the number of trained teachers) seemed to have exerted

¹ Tilak, B.G. Jandhyala (2003): *Financing Education in India*, NIEPA, Ravi Book Publication, New Delhi, p. 4

considerable influence on public financing of education. With respect to equity, it is felt that equality in outcome cannot be insured. Accordingly, the issues that received much attention of the educational planners and researchers relate mostly to equality in educational opportunities—regional, caste and gender groups of population measured in terms of literacy, involvements and number of institutions.

This chapter focuses on growth in public expenditure on elementary education during the last decade. Presenting a detailed profile on various aspects of public financing of elementary education in India, the chapter analyses the growth in total expenditure on elementary education, intra-sectoral allocation of resources, inter-functional allocation of resources etc. Thus the issues chosen are highly selective.

4.2 INDIA'S PICTURE

In absolute terms, the increase in expenditure on education at National level during the post-Independence period is very impressive. The educational expenditure increased by about 900 times from Rs 55 crores in 1947 to Rs. 62,000 crores in 1998-99, the latest year for which such data are available. According to the budget estimates, it would be of the order of Rs. 78,000 crores in 2000-01. But this impressive growth is lessened down by

- (a) Rapid growth in population,
- (b) Phenomenal increase in student numbers, and above all
- (c) Escalation in prices i.e. inflation.

As a result of growth in population, while the total expenditure on education increased more than 500 times, in per capita terms the increase between 1950-51 to 1998-99 has been by about 200 times only. In contrast, the expenditure per pupil increased only by 92 times during the same period, from Rs. 36 to Rs. 2640. These figures are at current prices and one impressive picture remains no more so impressive, if they are converted into constant prices.

TABLE 4.1

GROWTH RATE OF PUBLIC EXPENDITURE ON EDUCATION IN INDIA

Years	At current prices			At constant (1993-94) Prices		
	Total	Per capita	Per pupil	Total	Per capita	Per pupil
1950s	11.49	9.30	3.78	5.58	3.51	-1.72
1960s	12.77	10.26	11.97	4.78	2.44	4.05
1970s	12.64	10.30	8.98	4.37	2.20	0.98
1980s	16.21	13.84	11.68	7.47	5.28	3.28
1990s	15.61	13.78	15.91	6.57	4.89	6.84
1950-51 to 1998-99	13.91	11.35	9.75	6.67	4.28	2.78

Source: upto 1983-84, based on Education in India, (Various years). After 1983-84, based on Analyses of Budgeted Expenditure on Education and selected Educational Statistics.

After adjusting these figures with the help of national income deflators, it can be noted that the real rates of growth in total, per capita and per pupil expenditure on education are very small as shown in table. For instance, as compared to a rate of growth of 13.9 percent in current prices, the total expenditure on education improved at a rate of growth of 6.7 percent only in real prices during the five decades (1950-51 to 1998-99). The real rate of growth of per capital expenditure on education was about 4.3 percent and in per pupil terms the real growth was less than one-third of the growth in current prices. On the whole, the real rate of growth of total expenditure on education during the last five decade is marginally higher than growth in national economic indicators.

The decadal trends of growth in public expenditure on education are indeed important. Looking at the real rates of growth, one notices that the 1950s was a period of rapid growth, in total expenditure on education. But in 1960s, the growth rate goes down to 4.78 percent and further to 4.37 percent in 1970s. The 1980s marked the revitalization of faith in education. 'Human Resource Development' becomes a favourite slogan by mid 1980s, and education was regarded as an important component of human (resource) development. Expenditure on education increased during the 1980s at a reasonably high rate of growth (7.47 percent), particularly compared to the preceding decade. The rate of growth could not be

sustained in the 1990s, may be because of the effect of economic reform policies introduced in India at the beginning of the 1990s. It goes down to 6.57 percent in 1990s.

The per capita expenditure on education at constant (1993-94) prices follows the same trend as experienced by total expenditure on education. The growth rate in per capital expenditure on education is however much lower than that of total expenditure. The highest growth rate was observed during 1980s and during 1990s; it goes down to 4.89 percent. During the period of 1950-51 to 1998-99, the per capita expenditure on education at constant (1993-94) prices grows at 4.28 percent, which is about two-third that of total expenditure on education.

Per pupil real expenditure on education follows somewhat different path than that of total and per capita expenditure. During 1950s, it experienced negative growth rate and rises to 4.03 percent in 1960s. It again dipped to 0.98 percent in 1970s but in 1980s it stood upto 3.28 percent. And in the 1990s, it recorded the highest growth rate of 6.84 percent. This type of trend in per pupil expenditure on education is due to increasing total expenditure on education but on the other hand due to decrease in growth rate of population leading to decrease in size of pupil population. From 1950-51 to 1998-99, the per pupil expenditure on education at constant prices increases at 2.78 percent which is less than half of the total expenditure growth rate. It would be interesting to interpret these trends in the framework of public finance, particularly as a phenomenon of “displacement effect” (Peacock and Wiseman, 1961), according to which, public expenditure on social sectors like education get displaced due to economic problems created and rises, and more importantly, public expenditure levels do not go back to the former (pre-war) levels even several years after the economic crisis. (Tilak, 1998).

4.3 INTER-SECTORAL ALLOCATION OF RESOURCES TO EDUCATION

Allocation of resources to education vis-à-vis other sectors, which can be referred to as inter-sectoral allocation of resources, is an important area which shows us the importance and priority of education. The priority given to education in the national development framework is measured in terms of a few select indicators such as the share of education in GNP, share of education in the government expenditure, share of education in the five year plan outlays, etc.

Share of education in gross national product is the most standard indicator of national efforts on the development of education in a given society. This reflects the relative priority being accorded to education in the national economy. This indicator is also found to be superior to several other indicators (Tilak, B.G., 2003.). On the recommendation of the Education Commission (1966), the Government of India (1968) quantitatively fixed target of investing six percent of national income in education from the public exchequer by 1986. Glances at the figures of expenditure on education as a proportion of GNP given in table show that over the years, it has increased remarkably. At the inception of planning (1950-51), India was spending 1.2 percent of GNP, and by 1998-99, it increased to 3.9 percent, even though the growth is not smooth, as noted from the table. This is indeed a remarkable increase.

TABLE 4.2

SHARE OF EDUCATION IN GNP (%)

Year	Percent	Year	Percent
1950-51	1.2	1980-81	2.8
1955-56	1.8	1985-86	3.0
1960-61	2.1	1990-91	4.1
1965-66	2.4	1995-96	3.6
1970-71	2.7	1999-00	4.5
1975-76	2.8	2000-01	4.2

Source: upto 1983-84, based on Education in India, (Various years). After 1983-84, based on Analyses of Budgeted Expenditure on Education and Selected Educational Statistics.

However, Jandhyala B.G. Tilak underlined that this proportion is less than

- (a) The requirements of the education system to provide reasonable level of quality education to all the students enrolled presently.
- (b) The requirements of the system to provide universal elementary education of eight years for every child of the age-group 6-14, and consequent growth in secondary and higher education, as universalization of elementary education in a comprehensive sense, includes universal provision of resources, universal enrolment, and universal retention.

- (c) The recommendation of the Education Commission (1966), the resolve made in the National Policy on Education 1968, reiterated in the National Policy on Education 1986 (Government of India, 1986) and the revised policy (1992) to invest six percent of GNP in education, and
- (d) The proportion of GNP invested in education in many other developing, leave alone developed, countries of the world, including Africa. It would also not possible to reach a level of six percent of GNP before the end of the tenth five-year plan i.e. 2007, as promised by the government recently, from the current level of about four percent.

According to the Human Development Report 2001, India ranks 104th with respect to share of public expenditure on education in GNP, among the 143 countries for which such data are available. India was devoting 3.2 percent of her GNP to education (1995-97) in comparison to a large number of countries, which spend more than six percent, some more than eight percent and a few more than ten percent. Some of the countries, which spend more than four percent of GNP on education, include countries, which are economically poorer than India. India had set a long time ago a target of six percent of GNP to be spent on education. This target still eludes, and may continue to elude in the near future.

4.3.1 Expenditure of Education in Relation with state income and state budget

A more important gauge of what is actually happening is revealed by the priority given to education in the government budget. This is also preferred as governments have more direct control on government budgets than on GNP. Unfortunately there is no 'education budget' per se in India. To arrive at an education budget of the country as a whole, one has to look at the education components in the Union budget, and more importantly in the budgets of all the states and Union Territories. Then only one can present a complete idea of the education budget in the country. We do not have such an 'integrated budget presentation' in our country. The Union budget fails to provide any significant idea, as its contribution is relatively very small compared to the state budgets for education.

Further, in the budget framework, resources flow from government in two forms—in the revenue account of the budget and in the capital account. While in the revenue budget, the share of education sector is reasonably large, in the capital budget the share of education is infinitesimally small, the net result being pushing

down the share of education in the total budget. If central and state budgets are taken into consideration, and both revenue and capital account are considered, the total budget resources available for education forms around ten percent only. It was 11 percent in 1998-99. We also notice that while in the central budget the share of education was 3.5 percent (4.5 percent in revenue budget, and nil in the capital budget), it was a little less than one-fifth of the budget of the state and Union territories (23 percent in the revenue budget and 1.2 percent in capital budgets) in 1998-99.

Three-time period data is considered for state financing of education. First 1992-93 is taken since 1992 in the year of commencement of new economic policies under the guidance and support of International Monetary Fund (IMP). The second time period taken is of 1997-98, when more vigorous liberal economic policies were initiated by new incumbent political coalition at the centre. The third time point is 2001-02 for which latest data are available.

From the table, we can observe that in the year 1992-93, majority of states and union territories spend more than 20 percent of their total revenue budget on Education and training. In some of the states, percentage of education and training budget to total revenue budget is more than 25 percent. They are Andhra Pradesh (25.4%), Assam (29.4%), Kerala (30.6%), Madhya Pradesh (25.6%), Manipur (28.3%), Orissa (25%), West Bengal (25.5%), and Delhi (25.6%). In some states and Union Territories, the percentages are even lower than 20. They are Arunachal Pradesh (16.3%), Jammu & Kashmir (13.9%), Mizoram (15.7%), Nagaland (12.4%), Sikkim (19.7%) and Andaman & Nicobar Islands (13.3%). So, Nagaland and Kerala are the lowest and highest spender on education out of their revenue budget. Some of the northern Indian backward states are also devoting major chunk of their revenue budget on education and training.

These high figures are not matching with the corresponding figures of percentage of total budget of education & training (revenue account) to state Net Domestic Product (SNDP). Kerala and Delhi, which are highest spenders on education out of their revenue budget, account for only 7.8 percent and 3 percent respectively of their state Net Domestic Product is the same. Some of the highest spenders on education as percentage to Net Domestic product are Arunachal Pradesh (9.7%), Manipur (14.1%), Mizoram (16.6%), Nagaland (8.9%), Sikkim (13.6%), Tripura (12.3%), Andaman & Nicobar Islands (12.8%).

TABLE 4.3

**RELATION BETWEEN BUDGETED EXPENDITURE ON EDUCATION AND
NET DOMESTIC PRODUCT OF STATES AND UNION TERRITORIES**

States\UTs	192-93		1997-98		2001-2002	
	% Of total Budget	% Of NSDP	% Of total Budget	% Of NSDP	% Of total Budget	% Of NSDP
Andhra Pradesh	25.4	4.6	19.5	3.61	19.68	3.59
A & N Islands	13.3	7				
Arunachal Prad.	16.3	9.7	16.92	8.39	14.17	8.38
Assam	29.4	6.4	28.82	7.27	29.37	6.89
Bihar	23.2	5.2	26.52	6.81	23.54	6.43
Delhi	30.6	3	13.78	2.33	26.44	1.83
Goa	24.4	7.8	16.97	6.15	12.14	3.79
Gujarat	22	4.2	22.96	3.52	15.16	3.28
Haryana	20.6	3.1	15.18	2.9	17.13	2.92
Himachal Prad	20.8	8	19.86	7.67	16.89	6.69
Jammu & Kashmir	13.9	5	16.71	8.33	14.77	7.09
Karnataka	22.2	4.5	20.65	4.22	19.19	3.67
Kerala	30.6	7.8	25.08	6.07	23.67	3.97
Madhya Pradesh	25.6	4.9	22.84	4.58	20.63	4.36
Maharashtra	23	3.5	20.92	2.85	27.41	4.34
Manipur	28.3	14.1	28.33	13.14	21.25	10.85
Meghalaya	20.2	8.2	29.11	10.19	18.2	6.93
Mizoram	15.7	16.6	20.53	11.31	16.73	11.47
Nagaland	12.4	8.9	14.94	7.4	13.79	6.99
Orissa	25	6.4	24.04	5.81	18.2	5.23
Pondicherry	20.1	7				
Punjab	23.4	3.4	17.45	3.19	15.44	3.12
Rajasthan	23.3	5.4	26.61	6.1	20.46	4.68
Sikkim	19.7	13.6	7.83	15.46	7.26	13.47
Tamil Nadu	23	5	23.04	4.44	19.97	3.88
Tripura	22.8	12.3	20.19	13.39	25.24	8.09
Uttar Pradesh	21.7	4.2	21.44	4.76	18.89	4.07
West Bengal	25.5	4	24.68	3.89	24.29	3.96
INDIA	13.4	4.6	13.78	3.77	12.51	3.74
C.V	0.22	0.51	0.24	0.53	0.26	0.50

Source: Analysis of Budgeted Expenditure on Education (various years)

These are all smaller states and union territories having small economy. That's why percentage of total budget of education & training (Revenue Account) to Net State Domestic Product is so high. The states and union territories

having smaller percentage for education and training are Andhra Pradesh (4.6%), Gujarat (4.2%), Haryana (3.1%), Karnataka (4.5%), Madhya Pradesh (4.9%), Maharashtra (3.5%), Punjab (2.4%), UP (4.2%), West Bengal (4%) and Delhi (3%). These are all bigger states and UTs having large economy. So even small percentage of Net State Domestic Product means large money for education. In the earlier chapter, we have already saw Punjab, Gujarat, Haryana, Delhi etc. having good infrastructural facilities in their primary and upper primary schools.

During 1997-98, 13.78 percent of total revenue budget (states+centre) is given to education and training. Andhra Pradesh, Arunachal Pradesh, Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Nagaland, Punjab and Sikkim are spending less than 20 percent of their total revenue budget on education. Otherwise all other states and union territories are spending over 20 percent of their revenue budget on education. Sikkim is the least spender but it accounts for 15.46 percent of its Net State Domestic Product. Among the state and Union territories, which are spending more than 25 percent of their revenue budget on education are Assam (28.82%), Bihar (26.52%), Manipur (28.33%), Meghalaya (29.11%), Rajasthan (26.6%), and Delhi (26%). The highest spender was Delhi (29.76%), which accounts for 2.33 percent of total Net State Domestic Product. In 2001-02, the number of states and union territories having expenditure on education less than 20 percent of their revenue budget increases drastically in comparison with 1997-98. They are Andhra Pradesh, Arunachal Pradesh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Sikkim, Tamil Nadu and Uttar Pradesh. Overall only 12.51 percent of total revenue budget (centre+all states) are devoted to education in 2001-02. After 1998, when more vigorous liberalization policies were undertaken, resources are shifted from social sector to economic sector to directly benefit the economy. Even the number of states and union territories spending more than one-fourth of their revenue budget on education also get reduced. Some of them who are spending more than 25 percent of their revenue budget on education are Assam (29.37%), Maharashtra (27.41%), Tripura (25.24%) and Delhi (26.44%). Assam and Delhi were already spending more than 25% since 1997-98 but Maharashtra and Tripura are new entrants.

During 1997-98, only seven states allotted more than 8 percent of their state domestic product to education. They are Arunachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Sikkim and Tripura. Sikkim allotted the highest

percentage of 15.49 percent. About seven states allotted less than 4 percent to education. They are Andhra Pradesh, Gujarat, Haryana, Maharashtra, Punjab, West Bengal and Delhi. Delhi allotted the least of 2.33 percent. During 2001-02, the condition became worse when only five states allotted 8 percent or more of state domestic product to education and training. They are Arunachal Pradesh, Manipur, Mizoram, Sikkim, and Tripura. Those spending less than 4 percent are also increased in number. The least allotment to education is done by Delhi, which is only 1.83 percent of state domestic product. Overall only 3.74 percent of total net state domestic product was allotted to education in 2001-02, which is less than what was allotted in 1997-98.

4.3.2 Emphasis Given on Elementary Education

Five-Year plans repeatedly promised to take the nation towards achieving universalization of elementary education. Elementary education was also included in the 'National Programme of Minimum Needs' in the five-year plans, and this inclusion has significant implication for allocation of resources, and for diversion of resources away from elementary education. This is expected to ensure favourable treatment in the allocation of resources, and to protect it from reallocation of approved outlays away from elementary education.

But even after five decades of development planning, and four decades after the deadline stipulated by the constitution, the goal of universal elementary education is still elusive. It is strongly felt that elementary education suffered in India, due to, apart from several factors, insufficient allocation of financial resources. While finances are an important constraint, they are however, not the only constraint, but one among many. Resources provide a necessary, but not a sufficient condition in achieving universal elementary education.

Within the education budget (revenue account), the allocation for elementary education is not constant over period of time. In 1992-93, about 45.23 percent of education budget was given for elementary education, which goes up to 49.75 percent in 1997-98 but again dropped to 48.65 percent in 2001-02. The allocation for elementary education within education budget is also not uniform among states. There are states, where expenditure is much less than national average and somewhere it is much more than the national average.

In 1992-93, the states and union territories, which have devoted 55 percent or more of their education budget to elementary education, are Arunachal Pradesh (62.28%), Assam (59.39%), Mizoram (57.49%), Nagaland (61.23%), Orissa (58%), Andaman & Nicobar Island (56.42%) and Dadra & Nagar Haveli (69.02%). These are all poor states and union territories both on economic and educational front. As a measure to check it, they are devoting a major chunk of their educational budget to elementary education. But due of inefficient utilization and poor governance, they are not able to enhance their availability and quality of elementary education.

On the other hand, in 1992-93 there are many states and union territories that are spending less on elementary education than national average. The worst spenders are Chandigarh (19.98%), Goa (25.11%), Punjab (32.37%), Delhi (24.05%), West Bengal (36.32%), Tripura (40.70%) and Pondicherry (40.79%). These are all among the relative developed states of India excluding Tripura and West Bengal. These states and union territories have already well developed elementary educational infrastructure. So, they are now concentrating on secondary and higher education for their betterment. Other states and union territories lie in between 55 percent and 40 percent and are medium spender on elementary education. All these states and union territories need to spend a majority of their educational budget on elementary education as recommended by the United Nations (55-60%).

In the year 1997-98, the number of states and union territories who are spending 55 percent or more of their education budget on elementary education increases and also that of spending less 40 percent. The new entrants who are spending more than 55 percent are Gujarat (55%), Himachal Pradesh (56%), Manipur (61.45%), Rajasthan and Uttar Pradesh (56%), apart from Arunachal Pradesh, Assam, Bihar, Madhya Pradesh, Manipur, Nagaland, Orissa and Dadra & Nagar Haveli. Some of the lowest spenders on elementary education are Andhra Pradesh (36.36%), Goa (27.92%) Jammu & Kashmir (39.76%), Punjab (31.63%), West Bengal (34.3%), Chandigarh (22.91%), Delhi (10.56%) and Pondicherry (37.99%). Goa, Chandigarh, Delhi and Pondicherry are urban centers where large private investment in elementary education is occurring. That's why government expenditure is much less on elementary education. Andhra Pradesh and West Bengal having poor educational infrastructure, West Bengal having higher pupil-teacher ration in elementary schools still have insufficient allocation to elementary schools within education revenue budget. It is a matter of great concern, which needs further investigation

TABLE 4.4

**BUDGETED EXPENDITURE (REVENUE ACCOUNT) ON
ELEMENTARY EDUCATION 1992-93**

States\UTs	Plan	Non-Plan	Percentage to total Expenditure on Education
Andhra Pradesh	12.62	87.38	44.7
A & N Islands	10.81	89.19	56.42
Arunachal Prad.	40.8	59.2	62.28
Assam	24.98	75.02	59.39
Bihar	5.72	94.28	64.01
Chandigarh	5.2	94.8	19.98
D & N Haveli	10.33	89.67	69.02
Daman and Diu	3.33	96.67	44.41
Delhi	41.2	58.8	24.05
Goa	14.89	85.11	28.11
Gujarat	2.57	97.43	51.16
Haryana	12.54	87.46	45.18
Himachal Prad.	20.67	79.33	54.77
Jammu & Kashmir	13.16	86.84	44.71
Karnataka	13.35	86.65	49.63
Kerala	0.38	99.62	47.44
Lakshadweep	2.35	97.65	50.14
Madhya Pradesh	10.12	89.88	59.6
Maharashtra	4.91	95.09	44.01
Manipur	14.6	85.4	42.95
Meghalaya	27.54	72.46	57.77
Mizoram	15.7	84.3	57.49
Nagaland	8.21	91.79	61.33
Orissa	7.36	92.64	58.06
Pondicherry	10.12	89.88	40.79
Punjab	1.93	98.07	32.37
Rajasthan	9.77	90.23	51.43
Sikkim	34.32	65.68	58.02
Tamil Nadu	4.18	95.82	47.55
Tripura	16.27	83.73	40.7
Uttar Pradesh	4.85	95.15	43.92
West Bengal	2.8	97.2	36.32
INDIA	11.25	88.75	45.23
C.V	0.84	0.12	0.24

Source: Analysis of Budgeted Expenditure on Education (1992-93 to 1994-95)

TABLE 4.5

**BUDGETED EXPENDITURE (REVENUE ACCOUNT) ON
ELEMENTARY EDUCATION 1997-98(RE)**

States\UTs	Plan	Non-Plan	Percentage to total Expenditure On Education
Andhra Pradesh	15.5	84.5	36.36
A & N Islands	24.42	75.58	53.59
Arunachal Prad.	49.8	50.2	57.58
Assam	26	74	61.89
Bihar	5.41	94.59	66.49
Chandigarh	13.7	86.3	22.91
D & N Haveli	18.85	81.15	64.09
Daman and Diu	5.26	94.74	40.32
Delhi	8.19	91.81	10.52
Goa	3.29	96.71	27.92
Gujarat	6.27	93.73	55.05
Haryana	12.91	87.09	45.46
Himachal Prad	32.48	67.52	55.92
Jammu & Kashmir	27.15	72.85	39.76
Karnataka	15.69	84.31	52.07
Kerala	0.72	99.28	49.17
Lakshadweep	12.71	87.29	46.79
Madhya Pradesh	14.94	85.06	65.69
Maharashtra	3.63	96.37	46.1
Manipur	37.97	62.03	61.45
Meghalaya	10.67	89.33	52.05
Mizoram	17.18	82.82	50.97
Nagaland	7.47	92.53	64.59
Orissa	15.63	84.37	56.61
Pondicherry	18.22	81.78	37.99
Punjab	1.3	98.7	31.63
Rajasthan	14.49	85.51	56.19
Sikkim	35.84	64.16	52.16
Tamil Nadu	5.93	94.07	48.18
Tripura	44.96	55.04	50.2
Uttar Pradesh	14.16	85.84	56.1
West Bengal	10.24	89.76	34.3
INDIA	20.9	79.1	49.75
C.V	0.75	0.15	0.27

Source: Analysis of Budgeted Expenditure on Education (1996-97 to 1998-99)

TABLE 4.6

**BUDGETED EXPENDITURE (REVENUE ACCOUNT) ON
ELEMENTARY EDUCATION 2002-03(RE)**

States\UTs	Plan	Non-Plan	Percentage to total Expenditure On Education
Andhra Pradesh	8.11	91.89	44.14
A & N Islands	27.22	72.78	48.6
Arunachal Prad.	56.41	43.59	63.49
Assam	16.52	83.48	60.05
Bihar	7	93	68.97
Chandigarh	5.22	94.78	22.86
D & N Haveli	41.53	58.47	65.98
Daman and Diu	5.39	94.61	42.98
Delhi	48.7	51.3	21.53
Goa	3.38	96.62	23.27
Gujarat	8.66	91.34	53.77
Haryana	5.43	94.57	47.96
Himachal Prad	38.71	61.29	57.52
Jammu & Kashmir	19.37	80.63	46.78
Karnataka	14.19	85.81	50.32
Kerala	0	100	41.12
Lakshadweep	36.5	63.5	4.37
Madhya Pradesh	16.27	83.73	65.97
Maharashtra	1.68	98.32	44.41
Manipur	9.62	90.38	48.53
Meghalaya	27.76	72.24	54.19
Mizoram	26.46	73.54	53.37
Nagaland	6.91	93.09	63.21
Orissa	1.86	98.14	60.36
Pondicherry	23.27	76.73	38.31
Punjab	7.41	92.59	26.42
Rajasthan	7.02	92.98	57.23
Sikkim	33.92	66.08	57.34
Tamil Nadu	4.08	95.92	43.55
Tripura	24.48	75.52	54.33
Uttar Pradesh	5.49	94.51	56.12
West Bengal	6.23	93.77	33.36
INDIA	18.55	81.45	48.65
C.V	0.89	0.18	0.32

Source: Analysis of Budgeted Expenditure on Education (2001-02 to 2003-04), MHRD

The overall expenditure on elementary education out of total education (revenue account) expenditure has gone down in 2002-03 with respect to 1997-98. But overall situation remain the same across states and union territories. The highest expenditure was done by Bihar and lowest by Lakshadweep.

4.3.3 Share of Planned Expenditure in the Revenue Account of Education Budget on Elementary Education

All this may present a partial picture because non-plan expenditure is also equally important as plan expenditure. In fact, as the system grows, non-plan expenditure becomes more important in size. Plan expenditure are mean for meeting development needs, while non-plan expenditure meet the maintenance expenditure. The later is referred to as committed expenditure. Plan expenditure on education is relatively small in size; and a large proportion of the expenditure on education is non-plan in nature. In fact, non-plan expenditure forms the major chunk of expenditure on education. Nearly 85 percent of the expenditure on education in 1991 was of non-plan category and only 15 percent was accounted by plan expenditure. However, in the following years, plan expenditure grew faster, and as a result, currently plan expenditure from a little more than twenty percent of the total. It may be emphasized that since non-plan expenditure is only for maintenance, the smaller plan expenditure, and the small is the scope for setting new directions of development and to introduce innovations and reforms.

The same is true about expenditure on elementary education within revenue account. In 1992-93, 11.25 percent of total expenditure on elementary education within revenue account was planned and rest 88.75 percent was non-planned. In 1997-98, the planned expenditure proportion went up to 20.9 percent but in 2002-03 it again dipped to 18.55 percent. Also among states and union territories, the pattern of plan and non-plan expenditure on elementary education is not uniform from one to another.

In 1992-93, only fourteen states and union territories have plan expenditure on elementary education more than the national average of 11.25 percent. Those having figure more than 20 percent are Arunachal Pradesh (40.8%), Assam (24.98%), and Delhi (41.20%). So, Delhi has the highest planned expenditure on elementary education. Thee are all small states having good infrastructure as we have already seen in earlier chapter. These states and union territories still devote a large

proportion of expenditure on planned development of education. In these states and union territories, the non-planned expenditure is respectively less than 80 percent. This non-plan expenditure is so high because of inclusion of teacher's salaries into that.

And those states and union territories having plan expenditure on elementary education lesser than national average forms the majority in India. In 1992-93, the lowest spenders are Kerala (0.38%), Punjab (1.93%), West Bengal (2.8%), Lakshadweep, Gujarat (2.57%), Bihar (5.72%), Maharashtra (4.91%), Tamil Nadu (4.18%), Uttar Pradesh (4.85%), Daman & Diu (3.33%) etc. These states and union territories have given less than 5 percent of their elementary education budget (revenue account) as plan expenditure. Kerala recorded the lowest. Since Kerala has already better school infrastructure so it did not need to invest much more. It should invest more on child-centric measures such as free-text books, mid-day meal etc which needs more planned expenditure. The same story is also true for Punjab, Lakshadweep, Gujarat, Maharashtra, Tamil Nadu and Daman Diu. What is more astonishing that even poor states like Bihar, West Bengal and Uttar Pradesh which have poor educational infrastructure are also spending less on planned development activities of elementary education. In these states, economic conditions are not so good that respective state governments could devote a significant proportion of education budget on elementary education as plan expenditure or it might increased the education budget and elementary education budget and give a significant amount of that in planned development activities.

In 1996-97, pattern of plan and non-plan expenditure across states and union territories did not change much. Overall about 20.9 percent of total revenue account expenditure on elementary education constituted the plan expenditure and the rest 79.1 percent as non-plan. In the states and union territories also, conditions have improved. The number of states and union territories having plan expenditure more than 20 percent has increased over 1992-93 and that of less than 5 percent has decreased. But in 2002-03 (revised estimates), the situation again goes down when number of states and union territories having less than 5 percent expenditure on elementary education as plan expenditure increases. In 2002-03, some of the states and union-territories also started spending more on elementary education as plan expenditure. Some of them are Sikkim, Tripura, Andaman & Nicobar Islands, Dadra & Nagar Haveli, Lakshadweep, Delhi, Pondicherry etc. Orissa and Tamil Nadu also

join the category of states and union territories, which spend less than 5 percent of their elementary education budget as plan expenditure.

The poor and educationally backward states need to develop their elementary schools and their infrastructure. So, they need to spend a large chunk of their revenue elementary education budget on developmental activities. They should concentrate much more in providing basic facilities and incentives to children for their better enrolment. The mid-day meal scheme introduced to enhance school enrolment and their retention in school also demand large investment. The forward states should maintain their educational infrastructure and try to achieve hundred percent retention in elementary education through various children centric welfare measures.

4.3.4 Capital Account Expenditure on Elementary Education

Capital account expenditure is generally large expenditure occurred in a planned way to create assets at a time or in other developmental activities. Since large portion of education budget are already given under revenue account, so capital budget on education is so small. Within capital account expenditure on education, we would see how much of it is devoted to elementary education.

In 1992-93, at national level only 2.1 percent of total capital account expenditure is incurred on education. It further goes down to 1.11 percent in 1997-98. In 2002-03 (revised estimates), this percentage further goes down to 0.97 percent. This percentage also varies across states and union territories of India. During 1992-93, Dadra and Nagar Haveli spends about 10.62 percent of its total capital account expenditure on education whereas Assam, Jammu & Kashmir and West Bengal nil. Arunachal Pradesh, Haryana, Kerala, Punjab, Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Delhi and Lakshadweep spend about 5 percent or more of their total capital account expenditure on education.

While in 1997-98, the situation has changed drastically. Only one state Goa and four union territories of Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli and Daman & Diu spend more than 5 percent of their capital account expenditure on education. In 2002-03, the situation further deteriorates when only one state Sikkim and two union territories Andaman & Nicobar (6.29%) and Pondicherry (6.5%) only have expenditure above 5 percent on education. In large number of states, it is either zero or below one percent.

TABLE 4.7

CAPITAL ACCOUNT EXPENDITURE ON EDUCATION 1992-93

(RS IN THOUSANDS)

States\UTs	Capital Account Expenditure on Elementary Education	Total Capital Account Expenditure on Education	Total Capital Account Expenditure in Budget	Percentage of col. 2 to col. 3	Percentage of col. 3 to col. 4
1	2	3	4	5	6
Andhra Pradesh	27268	47725	8029451	57.14	0.59
A & N Islands	19142	74222	1219427	25.79	6.09
Arunachal Prad.	119822	119822	1522160	100.00	7.87
Assam	0	0	2378299		0.00
Bihar	0	78369	17761661	0.00	0.44
Chandigarh	5096	36637	546932	13.91	6.70
D & N Haveli	0	14549	137025	0.00	10.62
Daman and Diu	0	9103	122085	0.00	7.46
Delhi	0	218653	3905690	0.00	5.60
Goa	7568	34872	1324047	21.70	2.63
Gujarat	4256	110264	7988500	3.86	1.38
Haryana	4446	134628	2283348	3.30	5.90
Himachal Prad	14779	54293	2639987	27.22	2.06
Jammu & Kashmir	0	0	4712200		0.00
Karnataka	540	41235	7866336	1.31	0.52
Kerala	20821	211632	2778956	9.84	7.62
Lakshadweep	0	4985	91484	0.00	5.45
Madhya Pradesh	73937	324853	8363187	22.76	3.88
Maharashtra	0	26503	13800080	0.00	0.19
Manipur	1900	7162	997178	26.53	0.72
Meghalaya	0	30220	1025861	0.00	2.95
Mizoram	1415	6870	957725	20.60	0.72
Nagaland	5300	59218	1193054	8.95	4.96
Orissa	75400	106481	5873911	70.81	1.81
Pondicherry	0	14849	369996	0.00	4.01
Punjab	0	168263	2591028	0.00	6.49
Rajasthan	41851	124210	7001284	33.69	1.77
Sikkim	0	38600	868061	0.00	4.45
Tamil Nadu	359	53318	3223657	0.67	1.65
Tripura	524	20390	765921	2.57	2.66
Uttar Pradesh	3634	515500	12703818	0.70	4.06
West Bengal	0	0	2637235		0.00
INDIA	428058	2687426	127679584	15.93	2.10
C.V				1.55	0.82

Source: Analysis of Budgeted Expenditure on Education (1992-93 to 1994-95), MHRD.

TABLE 4.8

CAPITAL ACCOUNT EXPENDITURE ON EDUCATION 1997-98
(REVISED ESTIMATE)(RS IN THOUSANDS)

States\UTs	Capital Account Expenditure on Elementary Education	Total Capital Account Expenditure on Education	Total Capital Account Expenditure in Budget	Percentage of col. 2 to col. 3	Percentage of col. 3 to col. 4
1	2	3	4	5	6
Andhra Pradesh	0	71100	15276800	0.00	0.47
A & N Islands	67300	150000	1815100	44.87	8.26
Arunachal Prad.	119625	119625	3299500	100.00	3.63
Assam	0	62500	7586900	0.00	0.82
Bihar	0	0	13235300		0.00
Chandigarh	11700	35900	584898	32.59	6.14
D & N Haveli	16905	32072	245782	52.71	13.05
Daman and Diu	0	27400	183268	0.00	14.95
Delhi	165000	0	7532900		0.00
Goa	10261	74725	1469000	13.73	5.09
Gujarat	12360	114601	22848000	10.79	0.50
Haryana	0	222126	7416100	0.00	3.00
Himachal Prad	8501	59981	3873900	14.17	1.55
Jammu & Kashmir	229189	334424	13643700	68.53	2.45
Karnataka	0	56500	14166800	0.00	0.40
Kerala	17200	291300	9881700	5.90	2.95
Lakshadweep	0	5900	175900	0.00	3.35
Madhya Pradesh	263316	400346	22514400	65.77	1.78
Maharashtra	0	380201	41896800	0.00	0.91
Manipur	18000	23000	2822600	78.26	0.81
Meghalaya	16900	48832	1871500	34.61	2.61
Mizoram	2000	5000	2146300	40.00	0.23
Nagaland	28000	36450	2113200	76.82	1.72
Orissa	300	4623	11354600	6.49	0.04
Pondicherry	0	22175	1262933	0.00	1.76
Punjab	0	38473	12250500	0.00	0.31
Rajasthan	81479	160859	33757400	50.65	0.48
Sikkim	18300	45100	1476300	40.58	3.05
Tamil Nadu	0	50000	16152000	0.00	0.31
Tripura	0	4482	2615300	0.00	0.17
Uttar Pradesh	15741	675974	32873600	2.33	2.06
West Bengal	0	0	12267800		0.00
INDIA	1102077	3553669	320610781	31.01	1.11
C.V.				1.19	1.38

Source: Analysis of Budgeted Expenditure on Education (1996-97 to 1998-99), MHRD.

TABLE 4.9

CAPITAL ACCOUNT EXPENDITURE ON EDUCATION 2002-3
(REVISED ESTIMATE) (RS IN THOUSANDS)

States\UTs	Capital Account Expenditure on Elementary Education	Total Capital Account Expenditure on Education	Total Capital Account Expenditure in Budget	Percentage of col. 2 to col. 3	Percentage of col. 3 to col. 4
1	2	3	4	5	6
Andhra Pradesh	524756	524756	65037400	100.00	0.81
A & N Islands	38900	145300	2100100	26.77	6.92
Arunachal Prad.	0	1231	5220100		0.02
Assam	0	6500	20921600	0.00	0.03
Bihar	686212	1133014	46430200	60.57	2.44
Chandigarh	5900	41900	1587300	14.08	2.64
D & N Haveli	0	7600	396425	0.00	1.92
Daman and Diu	0	12500	313510	0.00	3.99
Delhi	123500	876400	19101700	14.09	4.59
Goa	1500	70421	4257300	2.13	1.65
Gujarat	0	24884	37873700	0.00	0.07
Haryana	0	85000	15302700	0.00	0.56
Himachal Prad	92766	145684	9065600	63.68	1.61
Jammu & Kashmir	330000	637300	22624500		2.82
Karnataka	0	50200	40772100	0.00	0.12
Kerala	660	147438	18485700	0.45	0.80
Lakshadweep	0	13550	461500	0.00	2.94
Madhya Pradesh	165389	370465	49367700	44.64	0.75
Maharashtra	0	84084	53525000	0.00	0.16
Manipur	18800	85239	8862200		0.96
Meghalaya	0	0	3780700		0.00
Mizoram	0	30	2863400	0.00	0.00
Nagaland	41082	214632	6195600	19.14	3.46
Orissa	30000	212701	24221800	14.10	0.88
Pondicherry	26155	136189	2093377	19.20	6.51
Punjab	105022	177222	28672100	59.26	0.62
Rajasthan	189015	245503	44744700	76.99	0.55
Sikkim	92500	249900	3246600	37.01	7.70
Tamil Nadu	197	12398	31808400	1.59	0.04
Tripura	174700	324377	7301800	53.86	4.44
Uttar Pradesh	1000	586972	87211400	0.17	0.67
West Bengal	15000	164315	36868100	9.13	0.45
INDIA	2663054	6787705	700714312	39.23	0.97
C.V				1.29	1.13

Source: Analysis of Budgeted Expenditure on Education (2001-02 to 2003-04), MHRD.

Within capital account expenditure on education, the share of elementary education is not uniform over various years. In 1992-93, at National level about 15.93 percent of total capital account expenditure on education is attributed to elementary education. In

1997-98, due to initiation of large number of school education projects, the share of elementary education in total capital account expenditure on education increases double fold to 31.11 percent and in 2002-03 it further goes up to 39.23 percent. This increase depicts the importance given to elementary education and development of infrastructure of primary and upper primary schools.

During 1992-93, Arunachal Pradesh devoted all its capital account expenditure on education to elementary education, Orissa devoted about 71 percent, Andhra Pradesh about 57 percent, Rajasthan 34 percent, Himachal Pradesh 27 percent, Manipur 25 percent, Andaman & Nicobar Islands (26%) etc. There are large numbers of states and union territories, which have given much less to elementary education and even, zero percent of total capital account expenditure on education. Some of the states and union territories who have given nil capital account expenditure to elementary education in 1992-93 are Assam, Jammu & Kashmir, Bihar, Maharashtra, Meghalaya, Punjab, Sikkim, Dadra & Nagar Haveli, Daman & Diu, Delhi, Lakshadweep, Pondicherry.

In 1997-98, the picture changes completely. About 14 states and union territories do not given any amount to elementary education in capital account. Some of the states and union territories spend more than 50 percent of total capital account expenditure on education on the upliftment of elementary education. They are Arunachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Manipur, Nagaland, Rajasthan and Dadra & Nagar Haveli. Arunachal Pradesh spends 100 percent of its educational budget on elementary education.

In 2002-03, the picture again changes drastically. About 13 states and union territories do not give any amount to elementary education in capital account expenditure of their budget. Some of the states and union territories which spend more than 50 percent of their total capital account expenditure of education on the elementary education. They are Andhra Pradesh, Bihar, Himachal Pradesh, Punjab, Rajasthan, and Tripura. Andhra Pradesh devoted its entire educational capital account budget to elementary education.

From the above discussion one thing that emerges out is that there is no clear picture about capital expenditure across states and union territories. The pattern of expenditure is quite erratic. In the educationally backward states and union territories, the infrastructures need to be more strong and efficient. For that capital account expenditure on education and also on elementary education needs to be increased in future.

4.3. Inter-functional allocation of Resources on education

The functional classification of expenditure on education given in the table confirms the most prevalent view that non-recurring expenditure on buildings, libraries, equipments, furniture etc. forms a very small proportion, less than three percent, of total expenditure on school education. That many schools are run in open spaces, kuchcha buildings, inadequate rooms etc. is a clear reflection of the same. Expenditure on fixed capital such as buildings however increases with increase in levels of education as deduce by Tilak. On the whole, formation of fixed capital in this human capital industry such as buildings takes place at a very slow pace, e.g. the normal real rate of growth of non-recurring expenditure at upper primary level between 1976-77 and 1987-88 is 1.9 percent, compared to 5.6 percent in recurring expenditure. According to B.G. Tilak “the slow pace may be justified, as the capital needs to the education sector might decline with fewer and fewer new schools being needed and opened, as there exist already schools in almost every habitation. But it should be noted that the backlog in terms of building is still high. This is clearly understandable as very often not only schools, but also colleges and even universities are found with no basic infrastructure facilities like buildings, furniture and equipments.” Thus, the present pattern of spending does not contribute much to the needs of physical capital formation in education.

Of the total recurring expenditure on school education, teachers salaries amount to more than 80 percent, and expenditure on the salaries of the non-teaching staff forms the next largest proportion, about eight percent. All other items, including teaching learning materials like apparatus, chemicals, books, libraries, games, sports, and other like financial and non-financial incentives etc. receive negligible amounts. Teacher’s salary increases as a proportion of the total recurring expenditure, as one goes down the educational ladder. The pattern has not changed much over the years. Among the non-recurring expenditure, buildings holds about 35 percent of total expenditure.

TABLE 4.10**INTER-FUNCTIONAL ALLOCATION OF RESOURCES IN SCHOOL**

Recurring	1992-93
Salaries of Teachers	85.6
Salaries of others	5.6
Maintenance of Buildings	
Maintenance of Equipment and Furniture	
Apparatus, Chemicals etc.	0.3
Libraries	0.1
Stipend, Scholarships, etc.	0.7
Games and Sports	
Hostels	1.4
Others	6.2
Total	100
Rs (crores)	13298
Non-recurring	
Libraries	2.7
Building	33.4
Equipments	
Furniture	
Other items	63.9
Total	100
Rs (crores)	353
Total Recurring	97.4
Total Non-Recurring	2.6
Grand Total	100
Rs (crores)	13651

Source: Education in India Vol. II 1992-93

of National Sample Survey conducted survey regarding average private expenditure (Rs) per student pursuing general education in rural and urban areas separately by level of education in 1998. The title of the survey was "*Attending an Educational Institution in India: its level, nature and cost*".

From the data, we can observe that in rural areas the average expenditure per student pursuing general education is Rs. 297 per annum for primary schools and Rs 640 for middle schools in 1998. In urban areas, this figure is quite high. It is Rs. 1149 for primary schools and Rs. 1529 for middle schools in 1998. In government schools the expenditure is quite low while in private unaided schools it is four times greater than that of government schools.

The state-wise disparities in per pupil private expenditure on primary education in rural areas are glaring and range from Rs. 132 in Karnataka to Rs. 1863 in Dadra & Nagar Haveli. Some of the states and union territories where spending is less than national average are Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka, Madhya Pradesh, Tamil Nadu, West Bengal and Lakshadweep. Some of the high spenders are Meghalaya, Nagaland, Punjab, Dadra & Nagar Haveli, Daman & Diu, Delhi etc. Northeastern states and union territories are high spender per pupil on primary education. In urban areas, the average private expenditure per student was highest in Delhi followed by Nagaland, Chandigarh, Sikkim, Haryana, Meghalaya, Punjab, Daman & Diu etc. The lowest was recorded by Lakshadweep i.e. Rs. 309. So, there are wide state wise disparities in per pupil private expenditure on primary education in urban areas varying from Rs. 2453 in Delhi to Rs. 309 in Lakshadweep. According to K.C. Nautiyal, it is true that although the state with the higher per pupil expenditure on primary education are not necessarily the same in terms of literacy achievement, yet by and large all the educationally better off states allocate much higher amount of per pupil public expenditure on primary education than the educationally worse off states.

There are several factors, which may account for unusual inter-state in per pupil expenditure on primary education. One important factor contributing to this in the Indian context appears to be the spatial factor i.e. the disparities in the density of population, hilly terrain etc. All the hill states in the eastern sector have considerably higher per capita expenditure on primary education.

In upper primary school sections, the per pupil expenditure in rural areas did not change much than that of primary schools. The national capital territory of Delhi accounts for the highest per pupil expenditure of Rs. 1792 followed by Nagaland, Punjab, Chandigarh, Haryana, Meghalaya etc. The lowest expenditure is incurred by Lakshadweep (Rs. 293) followed by Goa, Karnataka, Dadra & Nagar Haveli etc.

In urban areas, quite a different picture emerges for the upper primary schools. While Delhi tops the list with maximum per pupil expenditure of Rs. 2811 followed by Chandigarh, Nagaland, Haryana etc. West Bengal recorded the lowest followed by Lakshadweep, Pondicherry etc. Basically in urban areas and where state governments are not able to provide quality elementary education, there is a large-scale proliferation of private schools. In these private schools, the fees structure is quiet high, which led to raising of private expenditure on education. Apart from this the inflation is not same across different states.

“A comparison of unit cost of elementary education with those at higher education reveals the extent of misallocation of resource or imbalanced nature of development of education.”³ Unit cost at university level per student in India was more than 64 times that at primary level in 1983-84. Quite contrary to general opinion, cost of college education is only 11 times the cost of primary level. These ratios, particularly at primary and middle levels, are declining over time, suggesting some progress towards ‘balanced’ development. Yet the current ratios are very high. The need to reduce these ratios are obvious, and this has to be done by improving levels of investment in elementary and secondary education per pupil and not by reducing cost of high education.

4.4 CONCLUSION

The rapid expansion in elementary education in India after independence depicts the growth of public expenditure on education. However, the total expenditure on education increased at a rate of growth of 6.7 percent only in real prices during the last five decades. The rate of growth has gone down in the 1990s, may be because of the effect of economic reform policies. The per capita expenditure on education at

³ Tilak, Jandhyala B.G. (1988) Cost of Education in India, International Journal of Educational Development, 8(1), pp. 25-42

5.2 Reasons for Non-enrolment and Dropping out: According to NSSO Data, Fifty-second Round, 1998

According to NSSO, about 21 per cent of ever-enrolled persons of age 5-24 year had dropped out before completing the primary level, 28 per cent has completed the primary but did not attain the middle level. So, about half of those discontinued had either completed only up to primary level or failed to complete even that, about three-fourths have a maximum qualification of middle level and that 9 out of 10 have not completed the school system. This is the picture of phenomena of dropping out is our country (Sarvekshana, Jan-March, 2003).

It is to be mention that NSSO give only the distribution of dropouts by level of education as proportion of dropout from all levels of education. They don't give the drop out rate, which measures the rate at which children of a cohort drop out at different levels, for which information on the cohort over a complete cycle of the concerned level of education would be required.

The reasons for drop out are presented in the table. Child not interested in studies forms the single largest reason for dropout from any educational institution. Because of poor school environment, lack of proper educational infrastructure and other ancillary facilities, lack of any learning benefits etc. led to the disenchantment of children from schools. It is present both in rural and urban areas.

TABLE 5.1

PERCENTAGE OF DROPOUTS (AGE 5-24 YEARS) BY REASON FOR DROPPING OUT

	Reason for dropping out	Rural	Urban	Total
1	No tradition in the family	0.5	0.6	0.5
2	Child not interested in studies	25.3	22	24.4
3	Parents not interested in studies	10.2	6.9	9.4
4	Inability to cope with or failure in studies	21.5	25.6	22.5
5	Unfriendly atmosphere at school	0.5	0.4	0.4
6	Education not considered useful	1.9	1.3	1.7
7	School/higher education facilities not available conveniently	2	0.8	1.7
8	Has to work for wage/salary	4.1	6.9	4.8
9	Has to participate in other economic activities	8.2	6.5	7.8
10	Has to look after younger siblings	1.4	1	1.3
11	To attend to other domestic activities	4.6	4.3	4.6
12	Financial constraints	12.1	13.3	12.4
13	Completed the desired level			
14	Awaiting admission to the next level			
15	Other	6	6.7	6.2

Source: NSS 52ND Round, July 1995-June 1996, NSSO, Oct 1998.

The second most major reason for dropout is inability of the children to cope with or failure in studies. The children of the poor and marginalized section of our society generally don't get adequate support and care from school. In the family also, because of other difficulties, parents are also not able to help their children in studies. These all lead to failure in studies resulting into dropouts. This reason of dropout is dominant in urban areas.

The third major reason is financial constraints. Many recent survey indicate that the cash costs of education play a major role in discouraging poor families from sending children to school, especially when the quality of schooling is low. The PROBE survey (Public Report on Basic Education, 1999) suggests that north Indian parents spend about Rs.318 per year on (fees, bags, cloths etc.) an average, to send a child to a government primary school. This is a major financial burden, especially for poor families with several children of school-going ages.

Parents not interested in studies forms the fourth major reason for dropping out from any educational institutions. But PROBE survey contradicts this reason. In the PROBE surveyed states (where parental apathy is likely to be most widespread) most parents attach importance to their children's education. This problem or reason is more dominant in rural area than urban one.

Because of participation in other economic activities, the children are also not able to go to schools. This problem is more in rural areas than urban one. The other minor reasons are children have to attend to other domestic activities, have to work for wage or salary has to look after younger siblings etc. Basically girl children with higher age are deployed in domestic activities of household, to look after younger siblings instead of sending them to schools. This is one of the cases of gender disparity in our country. The causes or reasons for dropping out are not uniform over different states and union territories. It varies from one to another. This inter-state variation needs further study.

The national sample survey organization has also collected data regarding the percentage of never enrolled person (age 5-24 years) by reason for non-enrolment in its 52nd round. According to NSSO, 268 out of every 1000 person of age 5-24 years have never enrolled in any educational institutions. In rural areas, the numbers is 315 and in urban it is 120. Among males it is 201 and among females it is 342. Among rural females it is as high as 406. When we compare across the age groups, we see that as we move from 18-24 years to 14-17 and further to 11-14, there

is decline in the proportion of never enrolled which is an encouraging sign (Sarvekshana January-March, 2000). The trend however, changes when we move to 6-10 years age group. This is because of the late entry of children in the educational system. Quite a good proportion of children of ages 6,7 etc., who are currently not enrolled do join school latter. The distribution of non-enrolled by income group indicates that lower the income group, more is the proportion of never enrolled, as one would expect. It is as high as 610 in the case of lower income group for rural families. So, poverty is one of the factors, which affect the enrolment decisively.

TABLE 5.2

**PERCENTAGE OF NEVER ENROLLED PERSONS (AGE 5-24 YEARS)
BY REASON FOR NON-ENROLMENT**

	Reason for non-enrolment	Rural	Urban	Total
1	No tradition in the family	3.9	3.8	3.9
2	Child not interested in studies	17.3	17.9	17.3
3	Parents not interested in studies	32.6	25.6	31.8
4	Inability to cope with or failure in studies			
5	Unfriendly atmosphere at school			
6	Education not considered useful	2.8	1.5	2.7
7	School/higher education facilities not available conveniently	2.2	0.4	2
8	Has to work for wage/salary	1.4	1.3	1.4
9	Has to participate in other economic activities	3.6	2.5	3.5
10	Has to look after younger siblings	1.3	1.2	1.3
11	To attend to other domestic activities	2.7	1.5	2.6
12	Financial constraints	14.6	19.7	15.2
13	Completed the desired level			
14	Awaiting admission to the next level			
15	Other	17.6	24.4	18.4

Source: NSS 52ND Round, July 1995-june 1996, NSSO, Oct 1998.

The three major reasons for non-enrolled given in table are: parents not interested in education of their wards (31.8%), child not interested in studies (17.3%) and financial constraints (15.2%). While in rural areas the same ranking holds good, the situation is different in urban areas. In the case of urban males, financial constraints (27.9%) followed by child not interested in studies (21%) and parents not interested in education of their wards (19.2%) are the main contributing factors in that order. But is the case of urban females, parents not interested in education of their

wards (30.4%) followed by financial constraints (17.5%), and child not interested in studies(15.7%) are the three factors. This shows that in the case of the male, financial constraints are the main reason for non-enrolled but in the case of females it is the attitude of parents towards female education which acts as a major constraint, though financial constraints is also an important contributing factor.

5.3 Association between access and retention in Elementary Education and Different Socio-Economic and Demographic Variables:

In this section, we have calculated correlation between elementary education indicators with different socio-economic and demographic variables to find out interdependency between them. The elementary education indicators are basically related to enrolment and retention in elementary schools, quality of infrastructural facilities available in schools, availability of schools, pupil-teacher ratio, expenditure on elementary education etc. The correlation is calculated differently for primary and upper primary schools for two-time period of 1993 and 2002. The data for this study is taken from Census of India (1991, 2001), National Family Health Survey-I (1992-93), National Family Health Survey-II (1997-98), National Sample Survey Organization, All India Educational Survey, Analysis of budgeted expenditure on education (MHRD), Economic Survey of India etc. The different variables along with their codes taken in this study are given before correlation matrices in the appendix I.

Analysis of Correlation:

The availability of infrastructural facilities (CI PS) in primary school is positively correlated with gross enrolment ratio of boys (GEB PS) and girls (GEG PS) in 1993 but it is not significant. It is highly correlated with retention of boys (0.709) and girls (0.662) in class V at 1percent level of significance. This is also true for upper primary schools. Both enrolment ratio and retention rate for both sexes in middle schools is positively correlated with infrastructure facilities (CI UP) available in the schools at 1 percent level of significance. So enrolment and retention in elementary schools increases along with better infrastructure facilities. This fact is also validated by many studies earlier also. In our schools, children have to bear the brunt of poor physical facilities, vacant positions of teaching staffs, teacher absenteeism or irregular hours, dearth of teaching aids and learning materials, lack of commitment of teachers, indifferent and at times harsh and discriminatory attitude of

teacher, and virtually no accountability. These deficiencies have been found to be more apparent in schools attended by children from poor families, mostly from scheduled castes and scheduled tribes (Pratichi trust 2002). So, to enhance the retention in schools, we have increased the facilities available in schools.

Teachers show little ability or even interests in handling a first generation learner. Children are physically punished if they are not able to follow lessons in school or do their homework and therefore, prefer to stay away, and thus become disinterested. In fact, a frequent reason cited for absence from school/discontinuance is that child is not interested (Bose, 2005). There is little in the school to hold his attention and made it a pleasant learning experience.

The availability of infrastructures in schools is negatively correlated with the expenditure on elementary education (ExEE). This means that increase in elementary education budget does not result in adequate improvement in condition of schools. The larger part of budget goes in the form of salaries of teaching and non-teaching staffs.

The pupil-teacher ratio in elementary schools is negatively correlated with enrolment and retention, particularly in primary but it is not significant. It means higher pupil-teacher ratio hinders the enrolment and retention in primary schools. Single teacher cannot handle a larger class and imparts education to students. For efficient functioning of primary and upper primary schools, the size of classes should be small. Large pupil-teacher ratio deteriorates the learning environment in government and local body schools. (Vaidyanathan and Nair, 2001). In some case, single teacher manages two-three classes simultaneously. Parents now recognized the value of education but are often disillusioned when the child hardly learns anything due to the poor functioning of schools particularly in backward rural and tribal areas and urban slums (PROBE, Survey, 1999).

The availability of primary school within habitation (WHPS) is not significantly affecting the enrolment and retention. But it is positively correlated with female literacy in 1993. The availability of upper primary school within habitation (WHUP) is significantly correlated with enrolment and retention in middle schools. The availability of upper primary school is also positively affecting the male and female literacy. According to Ramachandran, the distance of the school is an important factor. Many parents are reluctant to send older girls outside the village, preferring their early marriage. In the case of choice between siblings, boy gets a

preference over girl, particularly in the case of low income families. Studies have also put forth that possession of bicycles by households enhance enrolment and retention in upper primary schools as it would be easier to cover distance between home and school. However in the correlation analysis, households having bicycles (By) is not positively correlated with retention and enrolment in middle schools significantly.

Expenditure per student per annum in primary schools (EPS PSU) in urban areas, also affecting the gross enrolment. Higher the per student expenditure, lower will be the enrolment. However, enrolment is not significantly correlated with per student expenditure in upper primary schools.

Socio-economic Variables

Poverty (POV) is negatively correlated with retention in primary schools and with enrolment and retention both in upper primary schools. Children are easily enrolled in primary schools but their retention depends on the economic condition of their families. In the upper primary schools, both retention and enrolment depends on the economic conditions of the households. The greater incidence of poverty like in Bihar, Orissa etc. led to low enrolment of children in middle schools and their deployment in other economic activities. Even though education is free at the primary stage, particularly for girls, there are some other direct and indirect costs of schooling, which households have to bear, even in government or local authority schools where no fees are charged, textbooks are provided and school uniforms are given (NCAER, 1994). Generally when children are promoted from primary to upper stage, nominal admission fees are charged on them. This also led to non-enrolment in middle schools, particularly of girls and overall lower literacy rate. So, government should start programmes for the welfare of poor children to enhance their retention.

The percentage of 0-6 age populations (0-6P) in total population is negatively correlated with gross enrolment ratio for girls in 1993, and with retention rates for both boys and girls in 1993 and 2002 for primary schools. Generally higher number of younger children (0-6) in houses needs greater care. Older children are deployed to care these siblings. In the upper primary schools, 0-6 population is highly negatively correlated with enrolments and retention at 1% level of significance.

Child work participation rate (5-14 age group) is negatively correlated with retention for primary school and with gross enrolment ratio and retention rate both for upper primary schools. It means with increase in age, child are deployed to

work (economic activities) and this lead to decrease in enrolment and retention in elementary education. Older children are not free with their time, particularly in rural households. They are required at home for household work and in some cases, for economic activity in the peak season, including wage employment. For sending children to school, work adjustment has to do made within the family to enable the child to attend school. Poverty often acts in conjunction with other socio-economic factors to lead to the discontinuance of schooling. Among others are the educational levels of the parents (including the mother), occupation of the parents, economic status as measured by size of landholdings, caste, migratory character (seasonal) of the household uncertain incomes etc. (Bose, 2005)

Outside the agriculture, levels of income are comparatively better, certain and less child labour is required. This would certainly leads to high enrolment and retention in elementary schools. The percentage of non-agricultural male workers (naMW) is positively affecting the gross enrolment ratio for girls and retention rates for both sexes in primary schools in 1993. It is also happening in upper primary section on enrolment and retention rates for both sexes. In the upper primary schools, the correlation for enrolment and retention for girls is higher than boys. So, male workers outside agriculture are more concerned about the education of their wards than those involved in agriculture. One important fact is also to be noted that majority of non-agriculture male workers are concentrated in urban areas where good quality elementary education are available for their children. So, better accessibility to quality education along with greater income lead to higher enrolment and retention of children in elementary schools.

Female work participation rate (FWPr) have negative correlation with retention rates in primary schools (below -0.4) in 1993 at 5% level of significance. In 2002, the correlation values further decreases (below 0) for both the sexes, also level of significance improves to 1 percent in case of retention rate of boys in class V. In case of upper primary schools, the picture is more clear in 2002, when female work participation rate has negative correlation with retention rate (below -0.4) at 5% level of significance. So higher female work participation rate has a negative impact on retention of children in schools (6-14 age group). It is pursued that if the adult females participate in the labour market their children (particularly girls) stay at home to take care of all the domestic chores and younger children (Ghosh, 1998)

The percentage of cultivators (%Cut) in total workers also has negative correlation with retention rate (-0.65) in both 1993 and 2002, and with gross enrolment ratio of girls (-0.44) for primary schools in 1993. However, in case of upper primary schools, it is negatively correlated with both enrolment and retention in 1993 and 2003. Also correlation value is much higher than that of primary school at 1 percent level of significance. Basically in agricultural households, more labour are required to work in fields. For that purposes older children are employed in agriculture works in rural household.

In case of agricultural labourers (%AgL) in 1993, it is negatively correlated with gross enrolment ratios in primary school. The value of correlation is higher for girls than boys. In case of upper primary schools, the percentage of agricultural labourer in total workers is affecting gross enrolment ratio of girls in a negative way. In 2002, along with gross enrolment ratio of girl, it is also negatively affecting the retention rates for both sexes of upper primary school. It is also negatively correlated with male literacy rate (-0.397) at 5% level of significance.

The percentage of scheduled caste (ScP) in total population has negative impact on gross enrolment ratio of both sexes for primary school in 1993 but in 2002 it is only correlated with gross enrolment ratio of boys. In case of scheduled tribes (StP), it is only positively correlated with gross enrolment ratio of boys in primary school (0.413) in 1993.

The condition of Muslim community in our country is generally poor on social, economic and educational areas. There is a general believe in our country that Muslims are conservative and not open to modern school education. This is however validated by our correlation analysis only for primary school in 1993, when the percentage of Muslims in total populations (MusP) is negatively correlated with gross enrolment ratios for both sexes (above -0.450) at 5% level of significance. So, wider attention needs to be focussed on the upliftment of Muslims in our country.

Male literacy (Mlit) is positively correlated with gross enrolment ratio and retention rates for primary school in 1993. The value of correlation is high for girls. In 2002, it is correlated with gross enrolment ratio of girls and retention rates of both sexes (above 0.676). In case of upper primary schools, it is highly positively correlated with enrolment and retention (around 0.8) at 1% level of significance both in 1993 and 2002. But in 2002, the correlation values have gone slightly. In case of female literacy (Flit), the picture is quite different. In 1993, it is highly correlated with

enrolment and retention in primary and upper primary schools. The value of correlation is high for upper schools. In 2002, it is only correlated with gross enrolment ratio of girls in upper primary schools (0.496) at 5% level of significance. So, male literacy is still dominant factors vis-à-vis female literacy in ensuring higher enrolment and retention in elementary schools. Literacy exposes the people to the outside world and modernizing influences play a role in influencing the thinking of parents in retaining the child in school.

The percentage of households having cow dung cakes (Cdg) as fuel for cooking is negatively correlated with gross enrolment ratio of girls (-0.523) in primary school and female literacy (-0.394) in 1993. In upper primary schools, the situation remains same. Pande (2001) had said that some ecological factors, such as assignment to the girl child for collecting fuel wood, fodder, water and preparing cow dung cakes also lead to discontinuance especially when time and energy are required for their procurement. In those households where source of drinking water is away from house premises in rural areas, generally children particularly girls are assigned the task of collecting water from it. The fact is also validated by negative correlation between drinking water away from house premises and retention in class V for primary school in 2002. In case of upper primary schools, it is true for enrolment and retention.

5.4 CONCLUSION

There are various factors, which act collectively and determine the gross enrolment ratio and retention rate in elementary education. Some of these factor which influence the educational indicators positively and some negatively. Among the positive factors, availability of different infrastructural facilities in elementary schools, non-agricultural male workers, availability of upper primary schools within habitation, male and female literacy etc are the dominant. Among the negative factors, poverty, 0-6 age population, child work participation rate and percentage of cultivators in total workers are dominant. Other negative factors are households using cow dung cakes as fuel for cooking, percentage of scheduled caste in total population, female work participation rate, percentage of agricultural labourers in total workers, age of children, source of drinking water away from house premises, expenditure per student incurred in primary school in urban areas etc. These all factors affect or

determine the enrolment and successful completion of elementary education in varying degree.

Poverty is one of the main factors, which is affecting retention in upper primary schools significantly. Our government should try to decrease the impact of poverty on children. Along with midday meal programme, other programmes also need to be initiated like compulsory free education, provision of free textbooks, uniforms, stationary materials, notebooks etc. Poverty alleviation programmes need to be more vigorously implemented. The parents of children also need to be sensitised towards the education of their wards.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

The Indian Constitution recognizes education as one of the essential and critical obligations of the state. The Constitutional amendment further makes the elementary education as one of the fundamental right of the children between the ages of 6-14 years. However, in view of the immense difficulties involved, i.e. lack of adequate resources, disproportionate increase in population, resistance to the education of girls, general poverty of the people and illiteracy, and apathy of parents of scheduled caste, scheduled tribe and other backward classes (OBCs) for educating their children, adequate progress could not be achieved. About 33 percent of total illiterates of the world reside in India and about half of the primary school going children in the age group of 5-11 is out of school. The state of primary education in our country is not in good shape.

However, India has taken long strides in the spread and development of educational facilities specially during the plan period over the last 50 years. As a result, during 1961 only 13 percent of our people could read and write with understanding. During 1991, the percentage rose to 52 percent and to 64 percent in 2001(Census of India, 2001). But still millions of Indians continue to be deprived of the opportunity to learn. When we compare these figures with other countries, our picture become poorer. At the time of our independence, the condition of China and Sri Lanka were similar to us on educational front. But today the literacy rate in both countries is more than 80 percent, which is far better than us. Even some African countries are better than us.

It is a universal truth that elementary education provides basic foundation to man to become educationally sound. It empowers the people politically, economically and socially. The economic returns to primary education are estimated to be positive and high. The returns to primary education for weaker sections (eg. backward castes and girls) are also found to be sizeable, and in fact, higher than return to their respective counterparts (viz. non-backward castes and girls). Education has significant effect on improvement in income distribution and poverty reduction, improvement in health and nutritional status of the people. Its negative relationship with fertility and population growth, child mortality and malnutrition, and positive

association with adoption of family planning methods are noticed. Its positive correlation with general social, political and economic development, and overall quality of life are well organized.

Illiterates are concentrated more in villages than in towns and cities. Besides the scheduled castes and scheduled tribes, girls too have shown poor performances. The literacy movement and various educational programmes initiated at the national and the regional levels therefore required to be undertaken on a war footing in order to achieve continuous economic development in rural India. The various loopholes in these programmes need to be filled and they must be targeted to the disadvantaged sections of scheduled castes, scheduled tribes, girls and the poor.

We are yet to provide effective enrolment facilities in class I to VIII to nearly half of our school going-age population. Given the poor and inadequate basic infrastructural facilities like availability of schools within the habitation, school having pucca buildings and drinking water facility, classrooms teaching aids, and teacher at primary level, the fate of all enrolment drives is easy to guess. The state of physical facilities, classrooms and other infrastructure in government schools, particularly in rural areas and urban slums are poorer. Poor maintenance of state run or aided primary schools on account of paltry or absence of budgetary provision speaks of the nature and extent of concern exhibited by the state for implementing Universalization of Elementary Education (UEE). All over the country, people's confidence in the state managed primary educational institutions has reduced. People are now more attracted towards the private schools and admitting their wards into them. Allocation of funds for infrastructural and other ancillary facilities for government run elementary schools need to be enhanced.

It would be reasonable to say that the various educational facilities, such as schools, colleges and parameters such as investment in education, enrolment ratios, retention ratio, literacy level and levels of educational development are characterized by unequal distribution over states. They are biased in favour of urban areas and areas or states, which are relatively developed. While there are some regions, which are close to achieving the goals of UEE, there are other regions, which have still a long distance to go before they can achieve the same. They are thereby creating regional disparities.

Educational infrastructures like availability of schools within reasonable distance from house, schools with permanent buildings, appropriate

numbers of teachers, adequate stationary facilities, provisions of drinking water and toilets, other ancillary facilities etc., are needed for proper functioning of schools and imparting education to students. Moreover, these facilities are minimum necessities needed for school education and also to enhance the interests of children in schools. Other child centric measures are also needed to enhance the enrolment ratios in primary and upper primary schools.

Distance from school is one of the factors that affects access to education apart from quality of school facilities, gender, poverty, socio-cultural values etc. It is a critical factor in determining whether or not children, especially girls, attend school. The urban-rural disparity in enrolment of children can be explained, to a large extent by distance from schools. According to Sixth All India Educational Survey, about 78 percent of the rural population has a primary school within habitation and 94 percent has within the range of 1 km from the habitation including those primary schools that are within habitation. If we compare the figure of Sixth All India Educational Survey with those of fifth and fourth one, the availability of primary schools in India are either constant or have been deteriorated. In some selected states and union territories, the proportion of rural population served by primary schools within habitation has declined over the previous survey in 1993. In Chandigarh, Goa, Gujarat, Haryana, Karnataka, Maharashtra, Mizoram, Nagaland and Punjab, more than 90 percent of rural population has primary school within habitation. However, proportion of rural population having primary school within 1 km remain somehow constant at 94% from 1987 to 1993. But in 1993, there are still some states/UTs where proportion is less than 90 percent. Also wide regional disparity exists in the country as these figures vary from one state to another. According to Sixth All India Educational Survey, only 64 percent of SC dominated habitations population have primary schools within the habitation and about 91 percent within 1 km of range, which is lesser than total population accessibility. While the corresponding figures for scheduled tribes are 71 percent and 89 percent respectively.

The availability of upper primary school in India is worse than that of primary schools. According to Sixth All India Educational Survey, about 37 percent of rural population have access to upper primary schools within habitation and 85 percent within 3 km of their habitation. The conditions of scheduled caste and scheduled tribe dominated habitation are relatively poor.

The quality of facilities available in school greatly influences enrolment and dropout. According to the Sixth All India Educational Survey (1993), the percentage of total primary schools functioning in pucca buildings was 65 percent, which increases to 81 percent during 7th All India Educational Survey (2002). Still about 7 percent of the primary school is functioning either in kuchcha structure, tent or open spaces and 12 percent in partly pucca structure. In case of upper primary schools, about 82 percent are pucca. There is a wide regional variation. In the northeastern states, the percentage of pucca schools is comparatively very low. Funds allocated for construction of pucca school building constitute very little proportion of total budget. Adequate resources should be provided for it from our government.

In 2002, the percentage of primary schools having single teacher was 15 and pupil-teacher ratio was 42. This is quite a poor condition. The condition of upper primary schools is better than primary schools. However teacher absenteeism is very rampant in elementary schools making the situation worse. The provision of other ancillary facilities is not adequate in our schools. The union territories of India, Haryana, Kerala, Rajasthan etc. are performing better in providing facilities to their children.

The total expenditure on education has increased at a rate of growth of 6.7 percent only in real prices during the five decades (1950-51 to 1998-99). The real rate of growth of per capital expenditure on education was about 4.3 percent and in per pupil terms growth was 2.78 percent. On the whole, the real rate of growth of total expenditure on education during the last five decade is marginally higher than growth in national economic indicators. The total expenditure on education in 2000-01 was 4.2 percent of Gross National Product, which is less than what was promised in the educational policy (6% of GNP).

In 2001-02, the number of states and union territories having expenditure on education less than 20 percent of their revenue budget increases drastically in comparison with 1997-98. Within the education budget (revenue account), the allocation for elementary education is not constant over period of time. About 45 to 49 percent of education budget are devoted to elementary education. However these figures varies from state to state. The expenditure on elementary education is spent largely on non-plan account. Salaries of teaching and non-teaching staffs covers about 90 percent of total expenditure on elementary education and very

little are left for spending on infrastructure facilities. So, special fund should be carved out from education budget for spending on infrastructure facilities exclusively.

The availability of infrastructures in schools is negatively correlated with the expenditure on elementary education. This means that increase in elementary education budget does not result in adequate improvement in condition of schools. The larger part of budget goes in giving the salaries of teaching and non-teaching staffs. The non-availability of facilities in schools doesn't generate the interest of students in studying. These all led to low enrolment and retention in elementary schools of India.

In the last decade, there has been improvement in school enrolment. School attendance in the 6-14 age group has risen to nearly 80 percent, according to NFHS-II. Also important is the narrowing of gender gaps in school attendance, driven by a comparatively rapid increase in female school participation. But these positive developments are happening not without regional disparity. There are some states, which are doing very well while some are lagging behind.

The gross enrolment ratio in India in primary and upper primary schools in 2002 is 93 and 58 respectively. In case of primary school, the enrolment has increased over the years. But the enrolment in upper primary schools has remained constant, which is a matter of great concern. However net enrolment ratio is much lower than gross enrolment. The gender disparity against girls has been decreasing over period of time. The conditions of scheduled castes and scheduled tribes are also not better.

Universal Elementary Education includes not only universal enrolment, but also universal retention and universal achievement (Tilak, 2006). But the retention rate in the school is at a very low level. Out of every 100 children enrolled in class I, about 47 reach Grade VIII and 37 Grade X, according to the rates of drop out estimated for 2002-03. According to seventh All India Educational Survey (2002), the retention rate in class V is 62 percent. So, in 2002 still about 38 percent of students dropped out before completing the primary stage. The retention in schools has improved over period of time but still regional disparity exists across different states of India. The retention rate in upper primary schools is lower than primary schools. In 2002 the same states and union territories performing better in primary schools are also performing in upper primary schools. The retention rates of

scheduled castes and scheduled tribes are much lower than total population. Apart from these differences, retention of boys is greater than girls among all communities.

According to NSSO, child not interested in studies forms the single largest reason for dropout from any educational institution. The second most major reason for dropout is inability of the children to cope with or failure in studies and the third major reason is financial constraints. Parents not interested in studies forms the fourth major reason for dropping out from any educational institutions. But PROBE survey contradicts this reason.

The availability of infrastructural facilities in primary school is positively correlated with gross enrolment ratio of boys and girls. It is highly correlated with retention of boys (0.709) and girls (0.662) in class V at 1% level of significance. This is also true for upper primary schools. The pupil-teacher ratio in elementary schools is negatively correlated with enrolment and retention, particularly in primary but it is not significant. It means higher pupil-teacher ratio hinders the enrolment and retention in primary schools. Among the other factors, which influences the educational indicators positively are non-agricultural male workers, availability of upper primary schools within habitation, male and female literacy etc.

Poverty is negatively correlated with retention in primary schools and with enrolment and retention both in upper primary schools. Children are easily enrolled in primary schools but their retention depends on the economic condition of their families. In the upper primary schools, both retention and enrolment depends on the economic conditions of the households. Among the other negative factors, 0-6 age population, child work participation rate and percentage of cultivators in total workers are dominant, along with households using cow dung cakes as fuel for cooking, percentage of scheduled caste in total population, female work participation rate, percentage of agricultural labourers in total workers, age of children, source of drinking water away from house premises expenditure per student incurred in primary school in urban areas etc. These all factors affect or determine the enrolment and successful completion of elementary education in varying degree.

There is a strong need for the government to substantially increase their spending on education. It is generally felt that it is not the financial resources, but a political will that is lacking (Dreze and Sen, 1995). Suitable norms should be developed in such a way that a minimum proportion of state and central budgets are allocated to education consistently. The development of education should serve the goals of social equity and economic development.

APPENDICES

APPENDIX I

CORRELATION MATRICES

Educational variables.

CI PS	Composite index for different facilities available in primary school
CI UP	Composite index for different facilities available in upper primary schools
GEB PS	Gross enrolment ratio for boys in primary schools.
GEG PS	Gross enrolment ratio for girls in primary schools
GEB UP	Gross enrolment ratio for boys in upper primary school
GEG UP	Gross enrolment ratio for girls in upper primary schools
RB5	Retention rate for boys in class V
RG5	Retention rate for girls in class V
RB8	Retention rate for boys in class VIII
RG8	Retention rate for girls in class VIII
ExEE	Percentage of elementary school expenditure to the total education budget.
PTPS	Pupil-Teacher ratio in primary school
PTUP	Pupil-Teacher ratio in upper primary school.
EPS PSR	Expenditure per student incurred in primary school per annum in rural areas
EPS PSU	Expenditure per student incurred in primary school per annum in

urban areas

EPS UPR	Expenditure per student incurred in upper primary school per annum in rural areas.
EPS UPU	Expenditure per student incurred in upper primary school per annum in urban areas
BtED	Percentage of total budget in states/UTs devoted to education
WHPS	Primary school availability within habitation.
WHUP	Upper primary school available within habitation
Mlit	Male literacy rate
Flit	Female literacy rate

Other Demographic and Socio-economic variables

CWpr5-14	Child work participation rate for the age group of 5-14 year.
naMW	Percentage of non-agricultural male workers in total male workers
0-6P	Percentage of total population in the age-group of 0-6
ScP	Percentage of scheduled caste in total population
StP	Percentage of scheduled tribe in total population
FWPr	Female work participation rate
% Cut	Percentage of cultivators in total workers
% AgL	Percentage of agricultural labourers in total workers.
MusP	Percentage of Muslims in total population
Cdg	Percentage of households, which are using cowdung cakes as fuel

for cooking.

POV Percentage of population below poverty line.

DwApR Percentage of households where drinking water is available away from premises in rural areas.

By Percentage of households having bicycle

Correlation for Primary School, 1993

	CI PS	GEB PS	GEG PS	RB5	RG5	ExEE	PTPS	WHPS	POV	CWpr 5-14	naMW	Cdg	0-6P	ScP	StP	Mlit	Flit	FWPr	%Cut	%AgL	MusP
CI PS	1	.206	.299	.709*	.662*	-.372*	.094	.087	-.439*	-.471*	.519*	-.036	-.432*	.254	-.235	.523*	.306	-.402*	-.442*	-.098	-.200
GEB PS	.206	1	.843*	.247	.262	.169	-.302	-.043	.009	.026	.259	-.467*	-.167	-.580*	.413*	.455*	.435*	.307	-.236	-.361*	-.475*
GEG PS	.299	.843*	1	.463*	.517*	-.144	-.254	.159	-.276	-.259	.507*	-.523*	-.434*	-.393*	.343	.709*	.740*	.103	-.446*	-.415*	-.454*
RB5	.709*	.247	.463*	1	.983*	-.486*	-.001	.204	-.525*	-.591*	.645*	-.140	-.779*	.124	-.270	.786*	.662*	-.398*	-.651*	-.021	.028
RG5	.662*	.262	.517*	.983*	1	-.479*	-.039	.202	-.518*	-.625*	.666*	-.197	-.797*	.083	-.229	.812*	.726*	-.376*	-.645*	-.079	.002
ExEE	-.372*	.169	-.144	-.486*	-.479*	1	-.117	-.274	.723*	.570*	-.675*	-.041	.579*	-.377*	.454*	-.479*	-.403*	.570*	.594*	.058	-.122
PTPS	.094	-.302	-.254	-.001	-.039	-.117	1	-.193	.145	.075	-.096	.379*	.133	.420*	-.418*	-.213	-.307	-.303	-.096	.495*	.138
WHPS	.087	-.043	.159	.204	.202	-.274	-.193	1	-.505*	-.103	.216	-.259	-.250	-.184	.314	.338	.374*	-.044	-.348	-.013	-.142
POV	-.439*	.009	-.276	-.525*	-.518*	.723*	.145	-.505*	1	.384*	-.679*	.117	.523*	-.127	.068	-.568*	-.547*	.304	.564*	.335	.027
CWpr5-14	-.471*	.026	-.259	-.591*	-.625*	.570*	.075	-.103	.384*	1	-.566*	-.069	.450*	-.306	.242	-.592*	-.511*	.778*	.465*	.191	-.237
naMW	.519*	.259	.507*	.645*	.666*	-.675*	-.096	.216	-.679*	-.566*	1	-.335	-.530*	.007	.143	.702*	.711*	-.422*	-.750*	-.473*	-.042
Cdg	-.036	-.467*	-.523*	-.140	-.197	-.041	.379*	-.259	.117	-.069	-.335	1	.177	.604*	-.442*	-.327	-.394*	-.340	.195	.335	.142
0-6P	-.432*	-.167	-.434*	-.779*	-.797*	.579*	.133	-.250	.523*	.450*	-.530*	.177	1	-.174	.435*	-.721*	-.652*	.226	.560*	-.110	.001
ScP	.254	-.580*	-.393*	.124	.083	-.377*	.420*	-.184	-.127	-.306	.007	.604*	-.174	1	-.728*	-.030	-.173	-.609*	-.093	.364	.120
StP	-.235	.413*	.343	-.270	-.229	.454*	-.418*	.314	.068	.242	.143	-.442*	.435*	-.728*	1	.018	.205	.416*	.055	-.570*	-.574*
Mlit	.523*	.455*	.709*	.786*	.812*	-.479*	-.213	.338	-.568*	-.592*	.702*	-.327	-.721*	-.030	.018	1	.935*	-.296	-.737*	-.305	.031
Flit	.306	.435*	.740*	.662*	.726*	-.403*	-.307	.374*	-.547*	-.511*	.711*	-.394*	-.652*	-.173	.205	.935*	1	-.196	-.703*	-.351	-.018
FWPr	-.402*	.307	.103	-.398*	-.376*	.570*	-.303	-.044	.304	.778*	-.422*	-.340	.226	-.609*	.416*	-.296	-.196	1	.522*	-.113	-.442*
%Cut	-.442*	-.236	-.446*	-.651*	-.645*	.594*	-.096	-.348	.564*	.465*	-.750*	.195	.560*	-.093	.055	-.737*	-.703*	.522*	1	-.017	-.186
%AgL	-.098	-.361*	-.415*	-.021	-.079	.058	.495*	-.013	.335	.191	-.473*	.335	-.110	.364	-.570*	-.305	-.351	-.113	-.017	1	.310
MusP	-.200	-.475*	-.454*	.028	.002	-.122	.138	-.142	.027	-.237	-.042	.142	.001	.120	-.574*	.031	-.018	-.442*	-.186	.310	1

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Correlation for Upper Primary School, 1993

	CI UP	GEB UP	GEG UP	RB8	RG8	ExEE	PTUP	WHUP	POV	CWpr5 -14	naMW	Cdg	0-6P	ScP	StP	Mlit	Flit	FWPr	%Cut	%AgL	MusP
CI UP	1	.523*	.480*	.569*	.536*	-.403*	.201	.399*	-.415*	-.475*	.684*	-.133	-.342	.139	-.144	.442*	.287	-.455*	-.501*	-.212	-.099
GEB UP	.523*	1	.928*	.832*	.818*	-.438*	-.074	.471*	-.497*	-.549*	.717*	-.268	-.669*	-.008	-.096	.817*	.692*	-.249	-.619*	-.273	-.133
GEG UP	.480*	.928*	1	.793*	.845*	-.490*	-.206	.533*	-.538*	-.604*	.782*	-.366*	-.703*	-.063	.037	.880*	.865*	-.259	-.665*	-.355*	-.165
RB8	.569*	.832*	.793*	1	.972*	-.523*	.038	.453*	-.598*	-.625*	.654*	-.117	-.756*	.114	-.267	.777*	.664*	-.380*	-.572*	-.137	.084
RG8	.536*	.818*	.845*	.972*	1	-.534*	-.094	.455*	-.596*	-.649*	.681*	-.184	-.794*	.052	-.202	.812*	.761*	-.350	-.581*	-.197	.059
ExEE	-.403*	-.438*	-.490*	-.523*	-.534*	1	-.004	-.317	.723*	.570*	-.675*	-.041	.579*	-.377*	.454*	-.479*	-.403*	.570*	.594*	.058	-.122
PTUP	.201	-.074	-.206	.038	-.094	-.004	1	-.016	.076	.230	-.136	.168	-.080	.306	-.513*	-.174	-.334	-.103	-.159	.697*	.042
WHUP	.399*	.471*	.533*	.453*	.455*	-.317	-.016	1	-.606*	-.332	.573*	-.325	-.301	-.239	.358	.703*	.663*	-.208	-.646*	-.328	-.126
POV	-.415*	-.497*	-.538*	-.598*	-.596*	.723*	.076	-.606*	1	.384*	-.679*	.117	.523*	-.127	.068	-.568*	-.547*	.304	.564*	.335	.027
CWpr5-1	-.475*	-.549*	-.604*	-.625*	-.649*	.570*	.230	-.332	.384*	1	-.566*	-.069	.450*	-.306	.242	-.592*	-.511*	.778*	.465*	.191	-.237
naMW	.684*	.717*	.782*	.654*	.681*	-.675*	-.136	.573*	-.679*	-.566*	1	-.335	-.530*	.007	.143	.702*	.711*	-.422*	-.750*	-.473*	-.042
Cdg	-.133	-.268	-.366*	-.117	-.184	-.041	.168	-.325	.117	-.069	-.335	1	.177	.604*	-.442*	-.327	-.394*	-.340	.195	.335	.142
0-6P	-.342	-.669*	-.703*	-.756*	-.794*	.579*	-.080	-.301	.523*	.450*	-.530*	.177	1	-.174	.435*	-.721*	-.652*	.226	.560*	-.110	.001
ScP	.139	-.008	-.063	.114	.052	-.377*	.306	-.239	-.127	-.306	.007	.604*	-.174	1	-.728*	-.030	-.173	-.609*	-.093	.364	.120
StP	-.144	-.096	.037	-.267	-.202	.454*	-.513*	.358	.068	.242	.143	-.442*	.435*	-.728*	1	.018	.205	.416*	.055	-.570*	-.574*
Mlit	.442*	.817*	.880*	.777*	.812*	-.479*	-.174	.703*	-.568*	-.592*	.702*	-.327	-.721*	-.030	.018	1	.935*	-.296	-.737*	-.305	.031
Flit	.287	.692*	.865*	.664*	.761*	-.403*	-.334	.663*	-.547*	-.511*	.711*	-.394*	-.652*	-.173	.205	.935*	1	-.196	-.703*	-.351	-.018
FWPr	-.455*	-.249	-.259	-.380*	-.350	.570*	-.103	-.208	.304	.778*	-.422*	-.340	.226	-.609*	.416*	-.296	-.196	1	.522*	-.113	-.442*
%Cut	-.501*	-.619*	-.665*	-.572*	-.581*	.594*	-.159	-.646*	.564*	.465*	-.750*	.195	.560*	-.093	.055	-.737*	-.703*	.522*	1	-.017	-.186
%AgL	-.212	-.273	-.355*	-.137	-.197	.058	.697*	-.328	.335	.191	-.473*	.335	-.110	.364	-.570*	-.305	-.351	-.113	-.017	1	.310
MusP	-.099	-.133	-.165	.084	.059	-.122	.042	-.126	.027	-.237	-.042	.142	.001	.120	-.574*	.031	-.018	-.442*	-.186	.310	1

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Correlation for Primary Schools, 2002

	GEB PS	GEG PS	RB5	RG5	ExEE	EPS PSR	EPS PSU	PTPS	WHPS	POV	DwApR	By	0-6P	ScP	StP	Mlit	Flit	FWPr	%Cut	%AgL	MusP
GEB PS	1	.952*	.001	-.008	.128	.048	-.564*	-.181	-.125	.103	.104	-.270	-.070	-.451*	.015	.307	.120	.327	.003	-.032	-.302
GEG PS	.952*	1	.042	.061	.052	.002	-.453*	-.217	-.068	.078	.118	-.296	-.190	-.350	-.047	.380*	.229	.344	-.017	-.026	-.369
RB5	.001	.042	1	.953*	-.705*	-.059	-.160	-.104	.247	-.601*	-.609*	.330	-.692*	.212	-.119	.677*	.120	-.464*	-.640*	-.231	-.018
RG5	-.008	.061	.953*	1	-.721*	-.030	-.073	-.165	.283	-.610*	-.565*	.218	-.783*	.148	-.097	.696*	.211	-.385*	-.617*	-.287	-.085
ExEE	.128	.052	-.705*	-.721*	1	.047	-.062	.106	-.348	.602*	.548*	-.496*	.556*	-.236	.122	-.608*	-.308	.611*	.745*	.339	-.053
EPS PSR	.048	.002	-.059	-.030	.047	1	.431*	-.036	-.081	-.322	-.138	-.269	-.024	-.370	.119	.023	.045	.132	.026	-.492*	-.068
EPS PSU	-.564*	-.453*	-.160	-.073	-.062	.431*	1	.005	-.107	-.212	.003	-.172	.039	.047	-.019	-.165	.130	.021	.168	-.438*	-.087
PTPS	-.181	-.217	-.104	-.165	.106	-.036	.005	1	-.262	.213	-.324	.351*	.258	.278	-.140	-.268	-.168	-.351*	-.245	.501*	.075
WHPS	-.125	-.068	.247	.283	-.348	-.081	-.107	-.262	1	-.151	.062	.119	-.137	-.052	.454*	.256	.155	.045	-.129	.008	-.331
POV	.103	.078	-.601*	-.610*	.602*	-.322	-.212	.213	-.151	1	.421*	-.076	.489*	-.096	.270	-.483*	-.142	.205	.381*	.483*	-.171
DwApR	.104	.118	-.609*	-.565*	.548*	-.138	.003	-.324	.062	.421*	1	-.540*	.325	-.245	.259	-.342	-.132	.558*	.641*	.125	.025
By	-.270	-.296	.330	.218	-.496*	-.269	-.172	.351*	.119	-.076	-.540*	1	-.041	.545*	.001	.114	.010	-.650*	-.562*	.215	.008
0-6P	-.070	-.190	-.692*	-.783*	.556*	-.024	.039	.258	-.137	.489*	.325	-.041	1	-.202	.387	-.682*	-.327	.230	.535*	.176	.004
ScP	-.451*	-.350	.212	.148	-.236	-.370	.047	.278	-.052	-.096	-.245	.545*	-.202	1	-.240	.118	.277	-.286	-.122	.312	-.057
StP	.015	-.047	-.119	-.097	.122	.119	-.019	-.140	.454*	.270	.259	.001	.387	-.240	1	-.027	.057	.273	.270	-.160	-.329
Mlit	.307	.380*	.677*	.696*	-.608*	.023	-.165	-.268	.256	-.483*	-.342	.114	-.682*	.118	-.027	1	.596*	-.260	-.540*	-.397*	-.195
Flit	.120	.229	.120	.211	-.308	.045	.130	-.168	.155	-.142	-.132	.010	-.327	.277	.057	.596*	1	-.137	-.242	-.285	-.074
FWPr	.327	.344	-.464*	-.385*	.611*	.132	.021	-.351*	.045	.205	.558*	-.650*	.230	-.286	.273	-.260	-.137	1	.789*	.027	-.489*
%Cut	.003	-.017	-.640*	-.617*	.745*	.026	.168	-.245	-.129	.381*	.641*	-.562*	.535*	-.122	.270	-.540*	-.242	.789*	1	-.037	-.151
%AgL	-.032	-.026	-.231	-.287	.339	-.492*	-.438*	.501*	.008	.483*	.125	.215	.176	.312	-.160	-.397*	-.285	.027	-.037	1	-.005
MusP	-.302	-.369	-.018	-.085	-.053	-.068	-.087	.075	-.331	-.171	.025	.008	.004	-.057	-.329	-.195	-.074	-.489*	-.151	-.005	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Correlation for Upper Primary Schools, 2002

	GEB UP	GEG UP	RB8	RG8	ExEE	EPS UPR	EPS UPU	BtEd	PTUP	WHUP	POV	DwApR	By	0-6P	ScP	StP	Mlit	Flit	FWPr	%Cut	%AgL	MusP
GEB UF	1	.932*	.765*	.707*	-.461*	-.233	-.212	-.002	-.149	.388*	-.546*	-.490*	.067	-.577*	-.091	-.084	.775*	.275	-.173	-.508*	-.305	-.117
GEG UF	.932*	1	.772*	.782*	-.553*	-.060	-.094	-.027	-.303	.369*	-.519*	-.482*	.010	-.715*	-.064	-.146	.833*	.426*	-.183	-.538*	-.352*	-.185
RB8	.765*	.772*	1	.972*	-.739*	.023	.204	-.120	-.250	.531*	-.648*	-.609*	.270	-.671*	.095	-.033	.754*	.235	-.457*	-.629*	-.375*	-.002
RG8	.707*	.782*	.972*	1	-.754*	.136	.264	-.191	-.326	.474*	-.640*	-.623*	.225	-.706*	.102	-.077	.737*	.291	-.419*	-.595*	-.436*	-.047
ExEE	-.461*	-.553*	-.739*	-.754*	1	-.234	-.473*	-.083	.189	-.550*	.602*	.548*	-.496*	.556*	-.236	.122	-.608*	-.308	.611*	.745*	.339	-.053
EPS UP	-.233	-.060	.023	.136	-.234	1	.654*	-.109	-.420*	-.090	-.275	.147	-.160	-.143	.198	.092	.062	.207	-.068	.064	-.488*	-.102
EPS UP	-.212	-.094	.204	.264	-.473*	.654*	1	-.182	-.304	.202	-.311	-.193	.191	-.103	.319	.091	.069	.294	-.308	-.096	-.493*	.024
BtEd	-.002	-.027	-.120	-.191	-.083	-.109	-.182	1	.377	-.142	.169	-.044	.365	.095	.223	-.175	.139	.275	-.443*	-.396*	.344	.302
PTUP	-.149	-.303	-.250	-.326	.189	-.420*	-.304	.377	1	-.169	.228	-.190	.297	.274	.194	-.268	-.305	-.285	-.181	-.222	.687*	.111
WHUP	.388*	.369*	.531*	.474*	-.550*	-.090	.202	-.142	-.169	1	-.410*	-.226	.300	-.199	-.037	.248	.567*	.431*	-.235	-.394*	-.257	-.209
POV	-.546*	-.519*	-.648*	-.640*	.602*	-.275	-.311	.169	.228	-.410*	1	.421*	-.076	.489*	-.096	.270	-.483*	-.142	.205	.381*	.483*	-.171
DwApR	-.490*	-.482*	-.609*	-.623*	.548*	.147	-.193	-.044	-.190	-.226	.421*	1	-.540*	.325	-.245	.259	-.342	-.132	.558*	.641*	.125	.025
By	.067	.010	.270	.225	-.496*	-.160	.191	.365	.297	.300	-.076	-.540*	1	-.041	.545*	.001	.114	.010	-.650*	-.562*	.215	.008
0-6P	-.577*	-.715*	-.671*	-.706*	.556*	-.143	-.103	.095	.274	-.199	.489*	.325	-.041	1	-.202	.387	-.682*	-.327	.230	.535*	.176	.004
ScP	-.091	-.064	.095	.102	-.236	.198	.319	.223	.194	-.037	-.096	-.245	.545*	-.202	1	-.240	.118	.277	-.286	-.122	.312	-.057
StP	-.084	-.146	-.033	-.077	.122	.092	.091	-.175	-.268	.248	.270	.259	.001	.387	-.240	1	-.027	.057	.273	.270	-.160	-.329
Mlit	.775*	.833*	.754*	.737*	-.608*	.062	.069	.139	-.305	.567*	-.483*	-.342	.114	-.682*	.118	-.027	1	.596*	-.260	-.540*	-.397*	-.195
Flit	.275	.426*	.235	.291	-.308	.207	.294	.275	-.285	.431*	-.142	-.132	.010	-.327	.277	.057	.596*	1	-.137	-.242	-.285	-.074
FWPr	-.173	-.183	-.457*	-.419*	.611*	-.068	-.308	-.443*	-.181	-.235	.205	.558*	-.650*	.230	-.286	.273	-.260	-.137	1	.789*	.027	-.489*
%Cut	-.508*	-.538*	-.629*	-.595*	.745*	.064	-.096	-.396*	-.222	-.394*	.381*	.641*	-.562*	.535*	-.122	.270	-.540*	-.242	.789*	1	-.037	-.151
%AgL	-.305	-.352*	-.375*	-.436*	.339	-.488*	-.493*	.344	.687*	-.257	.483*	.125	.215	.176	.312	-.160	-.397*	-.285	.027	-.037	1	-.005
MusP	-.117	-.185	-.002	-.047	-.053	-.102	.024	.302	.111	-.209	-.171	.025	.008	.004	-.057	-.329	-.195	-.074	-.489*	-.151	-.005	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

APPENDIX II

STATEWISE PERCENTAGE OF GIRLS IN TOTAL ENROLMENT IN PRIMARY SCHOOLS IN INDIA

STATE/UTs	% OF Girls in Total Enrolment			% Of SC Girls in Total Enrolment		% Of ST Girls in Total Enrolment	
	1986	1993	2002	1986	1993	1986	1993
Andhra Pradesh	43	46	49	43	44	37	39
Andaman & Nicobar	47	48	48	0	0	47	48
Arunachal Pradesh	40	43	46	41	40	39	44
Assam	44	45	48	44	45	44	47
Bihar	33	36	43	27	32	35	38
Chandigarh	46	47	45	43	45	0	42
D and N Haveli	41	40	46	46	45	39	39
Daman and Diu	47	47	47	51	50	47	45
Delhi	46	48	47	44	47	50	48
Goa	47	48	48	46	48	42	45
Gujarat	43	45	46	43	46	42	44
Haryana	41	45	46	42	46	0	0
Himachal Pradesh	46	48	48	44	47	40	47
Jammu & Kashmir	40	43	45	41	45	0	41
Karnataka	45	47	48	44	45	43	44
Kerala	49	49	49	48	48	47	48
Lakshadweep	47	46	45	75	0	47	45
Madhya Pradesh	38	43	47	36	41	34	40
Maharashtra	45	47	48	44	47	41	45
Manipur	46	47	48	50	48	46	46
Meghalaya	50	50	51	49	47	50	50
Mizoram	48	47	48	0	51	48	47
Nagaland	47	48	48	0	44	47	48
Orissa	42	44	47	40	43	37	39
Pondicherry	48	48	48	51	50	50	73
Punjab	46	46	47	43	45	0	0
Rajasthan	28	34	45	23	30	22	28
Sikkim	45	47	50	46	48	47	48
Tamil Nadu	46	48	48	45	48	45	46
Tripura	45	46	48	45	46	40	43
Uttar Pradesh	34	37	46	30	35	35	40
West Bengal	43	46	49	42	44	38	40
INDIA	41	43	47	36	42	38	41
C.V.	0.11	0.08	0.03	0.39	0.29	0.42	0.31

SOURCE: Calculated from Fifth, Sixth, Seventh All India Educational Survey, NCERT.

APPENDIX III

**STATEWISE PERCENTAGE OF GIRLS IN TOTAL ENROLMENT IN
UPPER PRIMARY SCHOOLS IN INDIA**

STATE/UTs	% Of Girls in Total Enrolment			% Of SC Girls in Total Enrolment		% OF ST Girls in Total Enrolment	
	1986	1993	2002	1986	1993	1986	1993
Andhra Pradesh	36	40	46	33	36	26	27
Andaman & Nicobar	44	46	47	0	0	42	46
Arunachal Pradesh	38	41	46	32	37	35	41
Assam	41	45	48	40	45	42	45
Bihar	29	30	36	19	22	28	33
Chandigarh	47	47	46	39	45	0	36
D and N Haveli	39	36	38	46	47	33	33
Daman and Diu	43	45	47	36	44	33	43
Delhi	45	46	47	42	47	43	44
Goa	45	46	47	40	44	58	31
Gujarat	39	41	42	37	40	37	39
Haryana	31	40	44	25	37	0	0
Himachal Pradesh	40	45	47	38	43	32	40
Jammu & Kashmir	35	39	43	35	40	0	34
Karnataka	40	43	47	37	39	36	37
Kerala	49	49	48	48	48	48	48
Lakshadweep	41	45	44	0	0	40	45
Madhya Pradesh	28	35	41	22	30	20	31
Maharashtra	39	43	46	36	41	32	38
Manipur	43	46	49	52	43	44	45
Meghalaya	48	49	52	21	41	48	50
Mizoram	49	48	49	0	36	49	48
Nagaland	44	49	48	0	45	44	49
Orissa	36	40	45	30	35	27	31
Pondicherry	42	47	48	42	50	0	38
Punjab	42	45	47	37	41	0	0
Rajasthan	20	25	35	9	18	8	15
Sikkim	44	49	52	44	49	49	53
Tamil Nadu	41	46	48	40	46	41	46
Tripura	42	45	47	39	43	36	41
Uttar Pradesh	27	32	42	20	26	26	33
West Bengal	39	42	47	34	36	25	30
INDIA	35	40	44	31	36	30	36
C.V.	0.17	0.14	0.09	0.49	0.33	0.54	0.34

SOURCE: Calculated from Fifth, Sixth, Seventh All India Educational Survey, NCERT

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