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OCCASIONAL PAPERS

Status of UEE in the Light of NCERT Sixth All India Educational Survey Data

Arun C. Mehta

National Institute of Educational Planning and Administration
17-B, Sri Aurobindo Marg
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Abstract

Recently, the NCERT released the Sixth All India Educational Survey data. In the light of this, the present article critically analyses different components of Universal Elementary Education. Only three components, namely, universal access, enrolment and retention have been covered and the analysis is carried-out both at the state and All-India level and separately for primary and upper primary levels of education. Indicators such as percentage of habitations and rural population having accessed to primary and upper primary schooling facilities have been considered as indicators of access. The ratio of primary to upper primary schools over time has also been critically analysed. In addition, availability of a non-formal education centre and its enrolment and number of instructors in an unserved habitation has also been analysed. Gross Enrolment Ratio and growth of enrolment between the period 1986-87 to 1993-94 has been measured and critically analyzed. The out-of-school children and additional enrolment that would be required to achieve the goal of universal enrolment by 2001 has also been estimated. Retention rate and transition from primary to upper primary level is also analysed.

Status of UEE in the Light of NCERT Sixth All India Educational Survey Data

Arun C. Mehta*

1. INTRODUCTION

One of the important goals of universal elementary education is universal access to schooling facilities to all children upto the age 14 years. At the time of adoption of the Constitution in 1950, the aim was to achieve the goal within the next ten years i.e. by the year 1960. Keeping in view the educational facilities available in the country at that time, the goal was far too ambitious to achieve within a short span of ten years. Hence, the target date was shifted a number of times. Till 1960, all efforts were focused on to the provision of schooling facilities. It was only after near realization of the goal of access that other components of Universalisation of Elementary Education (UEE), such as enrolment and retention, started receiving attention of planners and policy makers. It is the quality of education, which is at present in focus in all the programmes relating to elementary education in general and primary education in particular.

Since 1950, impressive progress has been made in every sphere of elementary education. In 1950-51, there were about 210 thousand primary and 14 thousand upper primary schools. Their numbers are now increased to 611 thousand and 186 thousand respectively as in the year 1997-98, thus showing an average annual growth rate of 2.30 and 5.66 per cent. As many as 83 per cent of the total 1,061 thousand habitations have access to primary schooling facilities within 1 km and 76 per cent habitations to upper primary schooling facilities within a distance of 3 km. About 94 and 85 per cent of the total rural population is accessed to primary and upper primary schools/sections. The ratio of primary to upper primary schools over time has improved which is at present 3.5. More than 84 per cent of the total 570 thousand primary schools in 1993-94 had school buildings. The number of single-teacher primary schools has also considerably declined.

The number of teachers over time has increased many folds both at the primary and upper primary levels of education. From a low of 538 thousand in 1950-51, the number of primary school teachers in 1997-98 increased to 1,872 thousand (MHRD, 1999). Similarly, upper primary teachers during the same period increased from 80 thousand to 1,240 thousand. The pupil-teacher ratio is at present 42: 1 at the primary and 37:1 at the upper primary level of education. Despite the significant improvement in the number of teachers,

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* Fellow, National Institute of Educational Planning and Administration, New Delhi – 110016. The author is grateful to anonymous experts whose comments helped immensely to improve the quality of presentation. The author is also grateful to Prof. B. P. Khandelwal, Director, NIEPA for convening a meeting in which the article was presented and critically discussed.

the percentage of female teachers is still low at 33 and 36 per cent respectively at the primary and upper primary levels of education. However, the majority of teachers, both at the primary (87 per cent) and upper primary (88 per cent) levels, are trained.

Enrolment, both at the primary and upper levels of education, over a period of time has increased significantly. From a low of 19 million in 1950-51, it has increased to about 109 million in 1997-98 at the primary level and from 3 to 40 million at the upper primary level. The enrolment ratio (gross) at present is 90 and 59 per cent respectively at the primary and upper primary levels of education. The percentage of girls enrolment to the total enrolment at the primary and upper primary levels of education in 1997-98 was about 44 and 40 per cent. Despite improvement in retention rates, the drop out rates are still high at 40 and 54 per cent respectively at the primary and upper primary levels of education. The transition from primary to upper primary and upper primary to high/higher secondary level is as high as 94 and 83 per cent. Despite all these significant achievements, the goal to attain universal enrolment remains elusive and still seems to be a distant dream.

2. SCOPE

Though, the Department of Education, Ministry of Human Resource Development is the main agency responsible for collection of information on educational variables, the data coverage relating to access is limited to the extent that only number of educational institutions is collected and disseminated. The other indicators of access, such as number of habitations having access to schools/sections and rural population accessed to educational facilities, are not available on regular basis. The agency responsible for collection of information on these variables is *the National Council of Educational Research and Training* (NCERT) which collects information through its all-India educational surveys, the sixth survey with September 30, 1993, as its date of reference being the latest one. Apart from variables relating to access, it also collects information on a number of other variables, which are of vital importance; these are presently not being collected by other agencies. Recently, NCERT has disseminated some valuable statistics on access, institutions and enrolment through a set of its six volumes.

Needless to mention that since the latest available NCERT data pertains to the year 1993-94, the analysis presented is generally confined to that year only. However, invariably previous survey data conducted in 1986-87 is also referred to and has been used in the analysis. Some data from the MHRD publications is also used in the analysis. The analysis is presented both at the All-India and State/Union Territory levels.

The basic indicators of access have been extensively utilised in the present article. Indicators relating to both habitations and rural population are used. A composite indicator of schooling facilities has also been developed and States are grouped as educationally advanced and backward States. In addition, availability of a non-formal education (NFE) centre in an unserved habitation has also been critically analysed. The enrolment in NFE centres is compared with the enrolment at the primary and upper primary levels of education, so is its contribution to the corresponding age-specific population. Availability of instructors in NFE centres and average enrolment is also

looked into. In between, the ratio of primary to upper primary schools has also been critically analysed.

So far as the indicators relating to coverage are concerned, Gross Enrolment Ratio at the primary and upper primary levels of education is analysed. In addition, growth of enrolment between the period 1986-87 to 1993-94 has also been measured. The out-of-school children have also been computed for which enrolment at the flat rate of 15 per cent grossness (over-age and under-age children) is refined. Since other available estimates of grossness are outdated, the one used in the Eighth Plan (15 per cent) to estimate additional enrolment is also used in the present article.

Additional enrolment that would be required to achieve the goal of universal enrolment by the year 2001 has also been worked out. One of the basic indicators of efficiency, namely, retention rate, has been computed and analysed at the elementary level of education. Similarly, transition from primary to upper primary level is also analysed.

More specifically, the main objective of the present article is to analyse Sixth All India Educational Survey data with reference to the following areas:

- Growth of educational facilities between the years 1986-87 and 1993-94;
- Status of non-formal education and its contribution to relevant age-group population; and
- Growth of enrolment during the period 1986-87 to 1993-94 and the present position in terms of out-of-school children and retention rate.

Only three components, namely, universal access, enrolment and retention, have been covered in the present article. Since the article is primarily based upon the NCERT data, it is not possible to cover the fourth component of UEE, namely, the quality of education, because of the non-availability of data on this aspect from the survey sources.

The component-wise analysis is presented in the following sections.

3. UNIVERSAL ACCESS

Considerable progress has been made so far as the goal of universal access is concerned which is reflected in the number of habitations having accessed to primary schooling facilities. But despite the significant improvement in transition rate, the upper primary education facilities have not expanded at the same pace as the primary education has expanded. However, it may be noted that the ratio of primary to upper primary schools over a period of time has improved considerably. There are a large number of eligible habitations, which still do not have primary schooling facilities within a distance of one kilometer. Alternatively, the unserved habitations should have facilities of non-formal education but the number of centres and their enrolment do not suggest that they have had a significant contribution to enrolment either at the primary or upper primary levels of education.

First, a brief analysis of growth in number of habitations is presented.

Table 1: Total Number of Habitations and Estimated Population

States/UTs	Total Number of Habitations		Estimated Population (In '000)		Estimated Child Population 1993-94 (In '000)	
	1986-87	**1993-94**	**1986-87**	**1993-94**	**6-11**	**11-14**
Andhra Pradesh	57583	62905	58374	69555	9320	4799
Arunachal Pradesh	3237	3834	743	921	125	61
Assam	31803	41179	21697	23926	3417	1730
Bihar	102137	109858	79168	91105	13584	6578
Goa	2465	788	1134	1223	120	81
Gujarat	24390	25749	39589	43228	5386	3017
Haryana	7577	7589	15084	17639	2355	1325
Himachal Pradesh	30678	35003	4912	5490	647	404
J & K	14628	15176	6804	8835	1134	578
Karnataka	41980	48813	42314	47717	6093	3412
Kerala	6181	8745	27928	30117	3000	1931
Madhya Pradesh	106291	102276	58880	69560	9307	4807
Maharashtra	63728	72465	82105	92269	11358	6228
Manipur	2614	3369	1643	1943	236	137
Meghalaya	5337	6576	1761	1940	269	141
Mizoram	616	705	598	753	94	58
Nagaland	997	1277	972	1370	179	104
Orissa	69530	73148	29325	33368	4268	2262
Punjab	13492	13345	18974	21396	2516	1457
Rajasthan	51764	63970	39832	46429	6714	3468
Sikkim	1206	1407	374	458	62	36
Tamil Nadu	47392	45139	53049	57080	6307	3710
Tripura	6300	6802	2543	2934	406	213
Uttar Pradesh	228690	212125	124934	145227	20593	10413
West Bengal	59633	96511	61659	72864	9640	5130
A & N Islands	565	601	252	308	39	22
Chandigarh	23	36	602	697	75	42
D & N Haveli	434	489	119	148	19	10
Daman & Diu	64	67	90	105	12	8
Delhi	200	271	7870	9823	1168	624
Lakshadweep	7	15	43	55	7	4
Pondicherry	322	379	698	850	91	57
All India	981864	1060612	784000	899000	118541	62847

Note : Totals may not tally due to rounding of figures.

Source: NCERT (1992, 1995 and 1998).

3.1 Number of Habitations

The number of habitations presented in Table 1 reveals that it has increased to 1,061 thousand in 1993-94 from 982 thousand in the year 1986-87. This shows an increase of 79 thousand habitations (8.00 per cent) in a short period of about eight years. During the same period, the corresponding population (estimated) increased from 784 to 899 million, showing an increase of 14.67 per cent.

The State-wise analysis reveals that Madhya Pradesh, Punjab, Tamil Nadu and Uttar Pradesh are among the few major States which has shown a decline in the number of habitations. However, despite a decline in the number of habitations, the corresponding population in these States increased significantly. The increase in case of West Bengal is worth noticeable, which shows that the total number of habitations in the State increased from 60 thousand in 1986-87 to 97 thousand in the year 1993-94.

The number of habitations in rural areas having population of 300 and more (Table 1a) also indicates an increase by 9.56 per cent, which is 51 thousand in the absolute terms. The corresponding increase in the number of habitations having population of 500 and more is 40 thousand (11.06 per cent). The States which have shown a decline in the total number of habitations during 1986-87 to 1993-94 indicate that barring Tamil Nadu (population 300 and more), the number of habitations having population 300/500 and more during the same period has increased which means need of providing educational facilities to these new habitations, as well. During this period, it is observed that the percentage of habitations served and population accessed to schooling facilities remained almost stagnant. But in real terms, this indicates a significant improvement in educational facilities, which has been achieved despite the increase in the number of habitations and population.

3.2 Rural Habitations Having Access to Schooling Facilities

The number of habitations in rural areas, distributed according to population slabs and served by primary schools/sections at the all-India level, is presented in Table 2.

As per norms, a habitation is entitled to have a primary school, if it has a total population of 300 and more and has no school within a distance of one kilometre. However, the norm is often relaxed in case of hilly areas, difficult terrains and border districts. A distance of one kilometre is treated as the maximum walking distance to which a child is expected to travel from his residence to school.

Of the total 1,061 thousand rural habitations in the country, 528 thousand or about 50 per cent habitations had a primary school/section within the habitation itself in 1993-94. On the other hand, about 83.4 per cent habitations had a primary school/section within a distance of one kilometre. It indicates that, as against the norms, about 177 thousand habitations in 1993-94 did not have schooling facilities. The State-wise number of unserved habitations is presented in Table 3. The highest number of unserved habitations in 1993-94 was in Uttar Pradesh (43 thousand), followed by Madhya Pradesh (19 thousand), Rajasthan (16 thousand), Himachal Pradesh (14 thousand), Bihar (14 thousand) etc. Amongst the major States, Tamil Nadu had only 623 (1.38 per cent)

Table 1a: Rural Habitations Having Population of 300 or More and Served by Primary Schools/Sections

States/UTs	Number of Habitations (Population 300 & More)		Served within Habitation (%)		Served up to 1 km (%)	
	1986-87	**1993-94**	**1986-87**	**1993-94**	**1986-87**	**1993-94**
Andhra Pradesh	34979	37945	92.74	91.86	97.70	97.51
Arunachal Pradesh	574	666	80.31	83.03	87.80	90.69
Assam	21579	24372	78.38	65.80	92.71	89.02
Bihar	63131	69647	73.70	69.95	95.05	94.32
Goa	1037	504	59.59	87.10	91.61	95.83
Gujarat	19798	20810	96.50	96.03	99.23	98.32
Haryana	6456	6566	94.02	91.04	98.81	97.17
Himachal Pradesh	3587	4003	64.12	62.35	89.41	87.68
J & K	5807	6606	83.90	84.97	94.06	93.75
Karnataka	26055	26596	92.89	92.08	97.36	97.15
Kerala	6066	8316	75.16	64.29	88.34	83.54
Madhya Pradesh	51108	57203	87.92	87.04	95.69	94.75
Maharashtra	36910	39716	93.12	91.47	98.37	96.22
Manipur	1262	1604	88.99	82.04	98.18	95.26
Megahalaya	1566	1704	89.34	83.39	95.79	94.01
Mizoram	407	444	97.79	93.92	98.28	95.27
Nagaland	709	919	98.59	88.79	99.58	93.36
Orissa	29333	31153	82.76	79.91	96.24	96.13
Punjab	10763	10896	96.26	89.90	99.58	99.17
Rajasthan	28746	31733	87.09	86.66	90.83	93.05
Sikkim	346	484	83.53	73.55	90.46	85.95
Tamil Nadu	32071	31090	80.15	70.53	95.44	99.43
Tripura	2372	2779	58.52	56.06	86.72	86.79
Uttar Pradesh	102238	111604	47.61	49.62	86.01	85.64
West Bengal	42230	52253	73.07	54.76	96.71	91.94
A & N Islands	171	207	72.51	70.53	88.30	81.16
Chandigarh	21	30	90.48	83.33	100.00	93.33
D & N Haveli	99	152	65.66	50.66	89.90	88.82
Daman & Diu	45	47	60.00	59.57	93.33	100.00
Delhi	199	254	95.48	67.72	100.00	88.19
Lakshadweep	6	13	100.00	76.92	100.00	100.00
Pondicherry	239	274	82.00	64.60	98.74	97.08
All India	529910	580590	77.03	73.24	93.72	93.03

Source: Same as in Table 1.

unserved habitations of the total of 45 thousand habitations in the State. It may also be noted that most of the educationally backward States still have a large number of unserved habitations.

The percentage of unserved habitations to the total number of habitations in a State indicates that it is as high as 52.95 per cent in Aurnachal Pradesh, followed by Andaman & Nicobar Islands (44.93 per cent), Himachal Pradesh (40.56 per cent) and Sikkim (25.52 per cent) which may be due to difficult terrains and hilly areas in these States. Kerala has more than 1.55 thousand unserved habitations, which is 17.77 per cent of the total habitations in the State. Except Sikkim, Tripura and Andaman & Nicobar Islands, all other States and UTs have more than 90 per cent habitations accessed to a primary school/section within a distance of one kilometre. Kerala too has a lower percentage (83.54 per cent) than the all-India average of 93.03 per cent.

Table 2: Rural Habitations Served by Primary School/Sections, All India: 1993-94

	Population Slabs							
	5000 & Above	2000-4999	1000-1999	500-999	300-499	300 & Above	Below 300	Total
WITHIN HABITATIONS								
No. of Habitations	6853	49524	110430	158391	100046	425244	102807	528051
%	**96.3**	**93.6**	**88.3**	**74.3**	**54.8**	**73.2**	**21.4**	**49.8**
Population (Million)	49.7	141.1	151.6	112.8	39.1	494.3	19.0	513.3
%	**96.2**	**93.9**	**88.9**	**75.5**	**55.9**	**83.5**	**28.0**	**77.8**
UP TO 1 KM.								
No. of Habitations	7062	52004	121545	199640	159899	540150	343939	884089
%	**99.2**	**98.3**	**97.2**	**93.7**	**87.6**	**93.0**	**71.7**	**83.4**
Population (Million)	51.3	147.8	166.0	140.4	61.6	567.1	51.5	618.5
%	**99.3**	**98.3**	**97.3**	**94.0**	**88.0**	**95.8**	**75.9**	**93.8**
Total No. Habitations	7119	52928	125046	213059	182438	580590	480022	1060612
Total Population (Million)	51.7	150.3	170.6	149.3	70.0	591.9	67.8	659.7

Source: Same as in Table 1.

Daman & Diu and Lakshadweep were the only two Union Territories in the country that have provided a primary school/section to all habitations within a distance of one kilometre (see Table 4). Amongst the educationally backward States, Andhra Pradesh provided access to 97.51 per cent habitations compared to 94.32 per cent in Bihar, 94.75 per cent in Madhya Pradesh, 96.13 per cent in Orissa, 93.05 per cent in Rajasthan, 85.64 per cent in Uttar Pradesh and 91.94 per cent in West Bengal. All this shows that the goal

Table 3: Number of Unserved Habitations and NFE Centres: 1993-94

State/UT	Total Number of Habitations	Number of Unserved Habitations*	% of Unserved Habitations	Habitations with NFE(Primary) Centres	% of Habitations having NFE Centres to Unserved Habitations	Estimated Population of Unserved Habitations ('000)	Population of Habitations with NFE Centres	% of Population Served by NFE Centres to Population of Unserved Habitations
Andhra Pradesh	62905	7189	11.43	252	3.51	1210	79518	6.57
Arunachal Pradesh	3834	2030	52.95	33	1.63	178	3737	2.10
Assam	41179	5879	14.28	505	8.59	2429	352524	14.51
Bihar	109858	13388	12.19	80	0.60	3549	32155	0.91
Goa	788	95	12.06	1	1.05	22	174	0.79
Gujarat	25749	1093	4.24	0	0.00	345	0	0.00
Haryana	7589	529	6.97	0	0.00	203	0	0.00
Himachal Pradesh	35003	14197	40.56	4	0.03	1205	900	0.07
J & K	15176	2962	19.52	147	4.96	504	32958	6.54
Karnataka	48813	7932	16.25	0	0.00	1105	0	0.00
Kerala	8745	1554	17.77	20	1.29	2288	33888	1.48
Madhya Pradesh	102276	18664	18.25	2891	15.49	3458	665477	19.24
Maharashtra	72465	11432	15.78	13	0.11	2136	21408	1.00
Manipur	3369	410	12.17	52	12.68	83	15528	18.71
Meghalaya	6576	1573	23.92	161	10.24	190	20596	10.84
Mizoram	705	85	12.06	2	2.35	17	599	3.52
Nagaland	1277	160	12.53	0	0.00	56	0	0.00
Orissa	73148	12859	17.58	1905	14.81	1797	366803	20.41
Punjab	13345	571	4.28	0	0.00	102	0	0.00
Rajasthan	63970	16259	25.42	619	3.81	2666	161029	6.04
Sikkim	1407	359	25.52	0	0.00	69	0	0.00
Tamil Nadu	45139	623	1.38	0	0.00	175	0	0.00
Tripura	6802	1668	24.52	0	0.00	371	0	0.00
Uttar Pradesh	212125	42704	20.13	3781	8.85	13269	1967753	14.83
West Bengal	96511	11875	12.30	0	0.00	3587	0	0.00
A & N Islands	601	270	44.93	4	1.48	41	1075	2.62
Chandigarh	36	5	13.89	1	20.00	5	12	0.24
D & N Haveli	489	88	18.00	0	0.00	18	0	0.00
Daman & Diu	67	3	4.48	0	0.00	0.45	0	0.00
Delhi	271	37	13.65	2	5.41	62	12196	19.67
Lakshadweep	15	1	6.67	0	0.00	0.064	0	0.00
Pondicherry	379	29	7.65	0	0.00	7	0	0.00
All India	1060612	176523	16.64	10473	5.93	41147.51	3768330	9.16

Note : * Habitations without Primary Schools/Sections within 1.0 km.

Source: Same as in Table 1.

of universal access is almost achieved which is also reflected in the percentage of rural population served by the primary schooling facilities.

Many of the unserved habitations are not entitled to have a school/section because of the population norms. There are about 581 thousand habitations having population of 300 and more that is 54.74 per cent of the total habitations in the country. In a good number of these habitations schooling facilitates are not available within a distance of one kilometre. In percentage terms, it is as low as 7.0 per cent but in absolute terms, more

than 40 thousand habitations in 1993-94 did not have access to schooling facihties. The number of unserved habitations in 1986-87 (population 300 and more) was 142 thousand (26.76 per cent).

Mere coverage of habitation does not indicate exactly whether education facilities are available to all population. Therefore, a better and more reliable indicator of access is percentage of rural population served by schooling facilities which is presented in Table 4.

3.3 Rural Population having Access to Educational Facilities

In 1986-87, more than 95 per cent rural population had a primary school/section within a distance of one kilometre compared to 94 per cent in 1993-94. Though the percentage during 1986-87 to 1993-94 remained almost stagnant but is termed spectacular because of the massive increase in total number of habitations during the same period (Table 1). However, about 41 million people in 1993-94 did not have access to schooling facilities. The facilities distributed according to different population slabs (Table 2) reveal that both the percentages of habitations and rural population accessed to schools/sections decline with the decline in the population size. Of the total 7,119 habitations having population 5,000 and more; 7,062 had schooling facilities within a distance of one kilometre. This shows that more than 99 per cent habitations and rural population in this slab had access to schooling facilities. But, in the population slab 300-499, only 88 per cent habitations and population had access to schooling facilities.

On the other hand, it has been observed that a large number of habitations that are otherwise not entitled to have a school/section because of the population norm, had the same even within the habitation. Thus, about 103 thousand habitations having population below 300 representing 28 per cent population had access to schooling facilities within the habitation.

The aggregate data at the all-India level is useful to a limited extent. Unless the same is analysed at the disaggregated levels, the States/districts/blocks that do not have access to schooling facilities cannot be identified. But, the same cannot be analysed below the State/UT level because data at that level is simply not available. It may also happen that an unserved habitation may have a non-formal education centre or even an unrecognised private school, details of which are presented under item 3.6.

3.4 Upper Primary Education Facilities

Similar to primary schools, a detailed analysis is also carried out in relation to availability of upper primary schools/sections in habitations distributed according to population slabs (Table 5). Recently, NIEPA undertook a study on upper primary education which covered a district each in Kerala, Madhya Pradesh, Maharashtra and Uttar Pradesh (Varghese and Mehta, 1998b). Irrespective of States, it is found that a primary school is located within a distance of one kilometre from the nearest upper primary school. In majority of cases, an upper primary school is also located within a

distance of three kilometres, which means availability of both primary and upper primary schools in the sample districts.

Table 4: Rural Population Served by Schools/Sections 1993-94

State/UT	1993-94		Primary Schools/ Sections			Upper Primary Schools/Sections		
	Population(In '000)	Number of Habitations	Within Habitation	Up to 1 km		Within Habitation	Up to 3 kms	
			1993-94	1986-87	1993-94	1993-94	1986-87	1993-94
Andhra Pradesh	62905	50842	92.45	97.30	97.62	42.99	79.18	79.43
Arunachal Pradesh	3834	804	70.12	73.35	77.87	33.13	42.20	54.39
Assam	41179	21335	66.27	93.57	88.61	22.40	83.29	87.16
Bihar	109858	79130	77.19	95.86	95.51	27.13	88.30	88.33
Goa	788	726	91.77	90.60	97.01	63.94	91.80	92.87
Gujarat	25749	28270	97.12	99.45	98.78	76.79	94.43	94.48
Haryana	7589	13311	94.47	99.37	98.47	64.70	93.12	93.26
Himachal Pradesh	35003	5016	45.07	76.64	75.97	17.33	76.04	78.22
J & K	15176	6599	82.68	90.70	92.37	38.41	85.99	86.78
Karnataka	48813	32349	91.11	97.24	96.58	60.86	89.78	91.42
Kerala	8745	22160	76.67	94.39	89.68	50.54	96.22	91.84
Madhya Pradesh	102276	53580	84.67	92.92	93.55	31.36	69.58	72.60
Maharashtra	72465	51118	90.65	97.95	95.82	61.08	88.46	87.64
Manipur	3369	1409	82.26	97.39	94.12	37.25	80.19	82.24
Megahalaya	6576	1579	74.05	89.22	87.97	25.57	64.99	69.50
Mizoram	705	409	94.30	98.28	95.77	77.58	82.85	83.38
Nagaland	1277	1137	92.36	99.45	95.05	47.76	66.41	74.54
Orissa	73148	28705	76.10	92.83	93.74	34.21	83.35	87.88
Punjab	13345	14882	90.83	99.59	99.32	45.41	92.49	89.68
Rajasthan	63970	35796	85.39	92.90	92.55	46.96	77.00	79.00
Sikkim	1407	416	65.59	83.11	83.44	26.38	76.20	79.01
Tamil Nadu	45139	37647	77.16	96.02	99.53	35.36	84.07	87.78
Tripura	6802	2476	55.43	84.12	85.00	24.92	86.31	85.89
Uttar Pradesh	212125	116390	60.50	88.07	88.60	21.69	81.88	82.09
West Bengal	96511	51734	61.22	97.38	93.07	14.16	82.79	87.51
A & N Islands	601	226	70.45	83.01	81.75	44.37	73.57	77.03
Chandigarh	36	121	89.86	99.67	96.07	47.15	100.0	99.30
D & N Haveli	489	136	40.05	85.19	86.83	10.07	65.33	76.05
Daman & Diu	67	58	72.25	94.78	99.22	63.67	99.44	100.00
Delhi	271	1000	81.93	100.00	93.83	58.31	98.60	99.05
Lakshadweep	15	24	86.32	100.00	99.73	73.29	99.16	98.74
Pondicherry	379	306	74.75	99.02	97.68	43.73	96.48	95.76
All India	1060612	659691	77.81	94.45	93.76	37.02	83.98	85.00

Source: Same as in Table 1.

Table 5: Rural Habitations Served by Upper Primary Schools/Sections, All India, 1993-94

	Population Slabs						
	5000 & Above	2000-4999	1000-1999	500-999	500 & Above	Below 500	Total
WITHIN HABITATIONS							
No. of Habitations	6089	34244	47130	33312	120775	26365	147140
%	**85.53**	**64.70**	**37.69**	**15.64**	**30.33**	**3.98**	**13.87**
Population (Million)	44.65	100.25	67.19	24.68	236.77	7.45	244.22
%	**86.40**	**66.71**	**39.38**	**16.53**	**45.37**	**5.40**	**37.02**
UP TO 3 kms.							
No. of Habitations	6984	49618	107523	169239	333364	474292	807656
%	**98.10**	**93.75**	**85.99**	**79.43**	**83.73**	**71.60**	**76.15**
Population (Million)	50.76	141.58	147.5	118.91	458.75	102.02	560.77
%	**98.22**	**94.22**	**86.45**	**79.65**	**87.91**	**74.01**	**85.01**
Total Number of Habitations	7119	52928	125046	213059	398152	662460	1060612
Total Population (Million)	51.68	150.27	170.61	149.29	521.85	137.84	659.69

Source: Same as in Table 1.

Of the total 1,061 thousand habitations in the country in 1993-94, about 147 thousand (13.87 per cent) had upper primary schools/sections within the habitation, giving access to about 37.02 per cent population. The corresponding figures at the primary level are 40.80 (habitations) per cent and 77.80 (population) per cent. A marked increase in number of habitations is noticed when upper primary schools/sections within a distance of three kilometres is analysed. As many as 808 thousand habitations (76.15 per cent) providing access to about 85 per cent population had schooling facilities within a distance of three kilometres. However, when schooling facilities in terms of number of habitations having population of 500 and more is analysed; one notices that only 474 thousand (71.60 per cent) habitations had facilities within a distance of three kilometres. This shows that about 65 thousand habitations did not have access to an upper primary school/section but were otherwise entitled to have the same as per the norms.

The aggregate data further indicates that the number of habitations having access to upper primary schools/sections declines with the decline in population size of habitation, which is quite similar to the situation at the primary level. Of the 7,119 habitations having population of 5000 and more in 1993-94, about 98.10 per cent (6,984 habitations) had schooling facilities within a distance of three kilometres which declined to 79.43 per cent in the population slab 500-999 (Table 5). It may also be noted that more than 85 per cent of these habitations (5,000 and more) had schooling facilities within the habitation compared to 96 per cent at the primary level. On the other hand, a good

number of habitations (474 thousand) who had population below 500 in 1993-94 had schooling facilities within a distance of three kilometres of which about 26 thousand had the facilities even within the habitation. But the percentage population to which they serve is only 5.40 per cent of the total population in that slab.

The State-wise number of rural habitations having population of 500 and more and served by upper primary schools/sections is presented in Table 6. Across the States, in a large number of habitations, upper primary schools/sections are available within the habitation but their percentage to total habitations in a State varies from State to State. Amongst the major States, Andhra Pradesh (29.09 per cent), Bihar (20.73 per cent), Madhya Pradesh (27.33 per cent), Tamil Nadu (25.79 per cent) and Uttar Pradesh (17.01 per cent) had lower percentages of habitations in 1993-94 than at the All-India level (30.33 per cent). But, the situation improved significantly when habitations' having access to schooling facilities within a distance of three kilometres is analysed. As mentioned, more than 87 per cent of the total habitations having population of 500 and more in 1993-94 had access to upper primary schools/sections within a distance of three kilometres.

Like primary education, Daman & Diu and Lakshadweep also had all the habitations accessed to upper primary schools/sections within a distance of three kilometers. Except Orissa, educationally backward States had a lower percentage of habitations having access to a upper primary school/section within a distance of three kilometres, amongst which Madhya Pradesh (72.04 per cent) had the lowest percentage. In general, it has been observed that the States that had a lower percentage of habitations served by a primary school/section also had a lower percentage of upper primary schools/sections.

Further, it is noticed that a little more than 37 per cent rural population had access to upper primary schools/sections within the habitation compared to 85 per cent within a distance of three kilometres. It is only in Daman & Diu that the entire rural population is accessed to an upper primary school/section within a distance of three kilometres. Amongst the major States, Andhra Pradesh (79.43 per cent), Madhya Pradesh (72.60 per cent), Rajasthan (79.00 per cent) and Uttar Pradesh (82.09 per cent), all had a lower percentage of population served by upper primary school than at the all-India level. Most of these States too had a lower percentage in terms of number of habitations served by upper primary schools.

3.5 Villages Having Access to Educational Facilities

Apart from the number of habitations and the rural population served by schooling facilities, a third indicator which also gives information on access is the number of villages having schooling facilities. This indicator may be treated as an alternative to the first two indicators presented above. In view of the policy guidelines, indicators relating to habitations are more appropriate to assess availability of educational facilities. Of the total 586 thousand villages, about 417 thousand (71.18 per cent) villages in 1993-94 had primary schools (Table 7). This otherwise indicates that about 29 per cent villages did not have a primary school/section compared to 77 per cent not having an

Table 6: Rural Habitations Having Population of 500 or More and Served by Upper Primary Schools/Sections

State/UTs	Number of Habitations (Population 500 & More)		Served within Habitation (%)		Served up to 3 km. (%)	
	1986-87	**1993-94**	**1986-87**	**1993-94**	**1986-87**	**1993-94**
Andhra Pradesh	25477	28148	26.60	29.09	75.97	74.45
Arunachal Pradesh	271	366	38.01	48.09	56.46	73.22
Assam	14968	15167	23.01	23.31	84.65	88.00
Bihar	44821	50783	19.98	20.73	88.70	88.24
Goa	565	368	28.50	53.26	93.63	90.49
Gujarat	15869	16662	65.88	68.59	91.90	92.30
Haryana	5696	5946	40.98	44.43	89.36	89.17
Himachal Pradesh	1478	1661	34.17	34.02	90.19	92.41
J & K	3164	3830	40.36	39.35	92.38	90.76
Karnataka	18555	19280	49.12	54.54	87.65	89.11
Kerala	5911	7952	51.16	38.52	94.42	89.59
Madhya Pradesh	30155	36350	26.73	27.33	70.35	72.04
Maharashtra	26416	28714	50.98	54.10	85.22	84.25
Manipur	831	947	42.60	43.08	90.37	90.39
Megahalaya	681	642	41.12	42.52	78.85	81.46
Mizoram	251	266	89.64	86.09	92.43	89.47
Nagaland	474	636	39.03	43.24	64.56	70.13
Orissa	16671	18393	36.86	39.28	88.90	91.73
Punjab	8700	8997	33.20	31.50	90.87	86.71
Rajasthan	19457	21631	38.21	39.55	72.31	76.68
Sikkim	149	229	45.64	41.48	83.89	83.84
Tamil Nadu	23231	23252	25.55	25.79	82.26	85.55
Tripura	1471	1555	31.14	30.16	93.88	92.80
Uttar Pradesh	61664	71967	16.88	17.01	80.95	80.89
West Bengal	30973	33703	14.53	12.03	82.91	87.66
A & N Islands	105	135	50.48	51.85	82.86	82.96
Chandigarh	19	30	57.89	46.67	100.00	96.97
D & N Haveli	34	48	11.76	18.75	82.35	89.58
Daman & Diu	33	37	42.42	54.05	100.00	100.00
Delhi	194	240	43.81	41.67	97.42	98.75
Lakshadweep	6	13	100.00	69.23	100.00	100.00
Pondicherry	197	204	35.53	34.31	95.43	95.10
All India	358487	398152	29.78	30.33	82.94	87.91

Source: Same as in Table 1.

Table 7 : Number of Villages not Having Schooling Facility : 1993-94

States/UTs		Villages not Having Schools With					
		Primary Stage			Upper Primary Stage		
	Total No. of Villages	Number	%	But having NFE Centres	Number	%	But having NFE Centres
Andhra Pradesh	26650	3115	11.69	590	18539	69.56	1400
Arunachal Pradesh	3623	2212	61.05	19	3258	89.93	3
Assam	23888	7375	30.87	1352	18187	76.13	278
Bihar	67512	23702	35.11	309	56375	83.50	92
Goa	360	38	10.56	0	168	46.67	0
Gujarat	18003	705	3.92	0	6444	35.79	0
Haryana	6728	819	12.17	3	4067	60.45	5
Himachal Pradesh	16958	10387	61.25	2	14989	88.39	1
J & K	6590	1038	15.75	103	4357	66.12	33
Karnataka	27073	4348	16.06	0	16138	59.61	0
Kerala	1384	57	4.12	1	144	10.40	1
Madhya Pradesh	71611	16214	22.64	3195	60181	84.04	1090
Maharashtra	40516	3534	8.72	51	22895	56.51	55
Manipur	2190	355	16.21	70	1577	72.01	72
Megahalaya	5492	2155	39.24	199	4715	85.85	0
Mizoram	682	86	12.61	10	315	46.19	8
Nagaland	1228	198	16.12	0	881	71.74	0
Orissa	46927	15752	33.57	2143	37427	79.76	632
Punjab	12415	2091	16.84	0	9469	76.27	0
Rajasthan	37889	8732	23.05	802	28698	75.74	113
Sikkim	440	62	14.09	0	260	59.09	0
Tamil Nadu	15822	2383	15.06	16	10184	64.37	23
Tripura	855	41	4.80	0	311	36.37	0
Uttar Pradesh	112803	52316	46.38	12858	96754	85.77	678
West Bengal	37733	10918	28.93	0	32570	86.32	0
A & N Islands	504	278	55.16	3	416	82.54	0
Chandigarh	24	5	20.83	2	11	45.83	1
D & N Haveli	71	2	2.82	0	42	59.15	0
Daman & Diu	24	4	16.67	0	10	41.67	0
Delhi	200	32	16.00	2	99	49.50	1
Lakshadweep	7	1	14.29	0	2	28.57	0
Pondicherry	263	88	33.46	0	190	72.24	0
All India	586465	169043	28.82	21730	449673	76.68	4486

Source : Same as in Table 1.

upper primary school/section in the village. In absolute terms, 169 and 450 thousand villages in 1993-94 did not have a primary and upper primary school/section respectively in the village. Table 7 further reveals that the majority of villages did not have even a non-formal education centre. Compared to 169 thousand unserved villages (13.02 per cent), only 22 thousand villages had a primary non-formal education centre. Similarly, only 4 thousand (1.00 per cent) villages had an upper primary centre compared to 450 thousand unserved villages.

Further, it has been observed that many States did not have either a primary or upper primary NFE centre even in unserved habitations that may have a large number of out-of-school children. These States are Goa, Gujarat, Karnataka, Nagaland, Punjab, Sikkim, Tripura, West Bengal, Dadra and Nagar Haveli, Daman & Diu, Lakshadweep and Pondicherry. In rest of the States, NFE centres are in existence but their percentage to total unserved villages is too meager to have a significant impact on out-of-school children. For instance, Bihar has only 309 villages with a primary NFE centre compared to 24 thousand unserved villages. However, there may be a school within a distance of one kilometre but from the available data it is not possible to exactly know how many villages according to population norm are eligible for a school. In addition, unserved villages may also have unrecognised schools, details of which are presented in Table 8.

A little less than 50 per cent of the total villages in the country had both the unrecognised primary and upper primary schools in the village itself. In absolute terms, as many as 27 and 7 thousand villages had unrecognised primary and upper primary schools. Further, it has been noticed that the number of unrecognised schools in a village increases with increase in population size of the village. The other significant point that has been noticed is that at the all-India level, more unrecognised upper primary schools are in existence than the primary schools. This may be due to large number of unserved habitations, which do not have access to a recognised upper primary school. Even in villages that have population below 300, both unrecognised primary and upper primary schools are noticed to be in existence.

3.6 Unserved Habitations and NFE Centres

In addition to the number of unserved villages, State-wise percentage of habitations having NFE centres to total number of unserved habitations has also been analysed and the same is presented above in Table 3. The Table reveals that at the all-India level, only 5.93 per cent unserved habitations (within one kilometre) covering 9.16 per cent population had a non-formal education centre in 1993-94. The State-wise data, however, shows lower percentages than at the all-India level. Barring a few States, such as Assam (14.51 per cent), Madhya Pradesh (19.24 per cent), Manipur (18.71 per cent), Megahalaya (10.84 per cent), Orissa (20.41 per cent), Uttar Pradesh (14.83 per cent) and Delhi (19.67 per cent), all other States had this percentage lower than 10. This suggests that the basic objective of non-formal system has not been realised in providing alternative facilities to areas where out-of-school children concentrate and schooling facilities are not available.

Of the total 121 thousand primary and upper primary centres in 1993-94, 94.52 per cent were in rural areas and the remaining 5.48 per cent centres were in the urban areas. It has also been observed that irrespective of the area being rural or urban, a good number of centres are being run by the Voluntary Agencies, details of which are presented in Table 9.

Of the total 112 thousand primary centres, about 6,373 centres are being run by the Voluntary Agencies and the remaining 106 thousand are the Government run centres. Further, it has been noticed that irrespective of the management, the majority of the primary centres are in rural areas and their percentages to the respective total number of centres run by the Government and Voluntary Agencies are as high as 94.77 and 97.61. While anlaysing the number of primary centres distributed according to Government and Voluntary Agencies, one finds that the contribution of Voluntary Agencies is limited to the extent of only 5.69 per cent (6,373 centres). Similar pattern is also noticed in case of the upper primary centres (in percentage terms); though its number compared to primary centres is very small. Thus, about 5,164 and 509 upper primary centres in 1993-94 were functioning respectively under the Government and Voluntary Agencies (Table 9). In addition, there were a few combined primary and upper primary centres but their number compared to other types is small and majority of them are the Government run centres.

Further, it has been observed that barring 14 States, all other States had only a few centres that are being run by the Voluntary Agencies (Table 10). Some of these States are Karnataka, Nagaland, Punjab, Tripura and West Bengal. The highest number of centres run by the Voluntary Agencies are in Orissa (2,200), followed by Uttar Pradesh (1,250) and Andhra Pradesh (1,030). On the other hand, the State-wise number of upper primary centres presented in Table 10 reveals that compared to the primary level, only a few upper primary centres are in existence. About, 5,164 and 509 upper primary centres respectively, run by the Government and Voluntary Agencies, were in existence in 1993-94 which is only 4.89 and 7.99 per cent of the total primary centres in the country. Only Andhra Pradesh (3,025), Madhya Pradesh (1,262), Orissa (447) and Uttar Pradesh (119) had a few upper primary Government centres where as the percentage of centres run by the Voluntary Agencies to the total upper primary centres was 8.97 per cent.

Research findings revealed that one of the reasons of low enrolment in rural areas is the non-availability of schools for girls and female teachers. However, distribution of NFE centres indicate that only a few centres are made available to girls in both the rural and urban areas. So far as upper primary education is concerned, a recent study conducted in four major States revealed that separate school for girls is not a major issue. It is the distance of school from the house which is a deciding factor for parents whether to continue or discontinue education of their girl wards (Varghese and Mehta, 1999b). If the school is integrated one (primary to high/higher secondary), chances of girls continuing education improve significantly than in independent schools.

The number of primary and upper primary centres distributed according to management and area is presented in Tables 10 and 11. At the all-India level, of the total 106 thousand primary centres there are only 5 thousand centres that are specifically meant for girls. In rural areas, the percentage of girl centres to total primary centres is only 4.73, most of these are Government owned centres. On the other hand, only 380 of the total 6,373 primary centres run by the Voluntary Agencies are the girl centres. The percentage

of girl centres to total primary centres further reveals that barring a few States, all other States have only a few girl centres. It is also true in case of the upper primary centres. Such States are Andhra Pradesh (11.9 per cent), Assam (3.64 per cent), Madhya Pradesh (4.18 per cent), Orissa (5.63 per cent), Rajasthan (11.18 per cent) and Uttar Pradesh (1.48 per cent).

Table 8: Villages Having Unrecognised Schools According to Population Slabs, All India: 1993-94

Population Slab	Number of Villages	Number of Villages having Unrecognised Schools				Number of Unrecognised Schools			
		Primary	%	Upper Primary	%	Primary	%	Upper Primary	%
Below 300	148165	3398	12.61	521	7.01	3646	9.59	546	6.09
300-499	89157	2974	11.03	623	8.38	3302	8.68	676	7.53
500-999	147069	6153	22.83	1509	20.29	7535	19.81	1809	20.16
1000-1999	119019	6542	24.27	2021	27.17	8700	22.88	2298	25.61
2000-4999	68116	5791	21.49	1967	26.45	9576	25.18	2362	26.33
5000 & above	14939	2095	7.77	796	10.70	5271	13.86	1281	14.28
Total	586465	26953	100.00	7437	100.00	38030	100.00	8972	100.00

Source : Same as in Table 1.

Table 9: Non-formal Education Centres According to Area, Management and Level, All India: 1993-94

Level	Government			Voluntary Agencies			Total		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Primary only	100073	5519	105592	6221	152	6373	106294	5671	111965
%	**94.77**	**88.72**	**94.31**	**97.61**	**2.39**	**5.69**	**94.94**	**5.065**	**100.00**
Upper Primary only	4538	626	5164	482	27	509	5020	653	5673
%	**87.88**	**12.12**	**91.03**	**94.70**	**5.30**	**8.97**	**88.49**	**11.51**	**100.00**
Primary and Upper Primary combined	2315	163	2478	313	115	428	2628	278	2906
%	**93.42**	**6.58**	**85.27**	**73.13**	**26.87**	**14.73**	**90.43**	**9.57**	**100.00**
Total	106926	6308	113234	7016	294	7310	113942	6602	120544
%	**94.43**	**5.57**	**93.94**	**95.98**	**4.02**	**6.06**	**94.52**	**5.48**	**100.00**

Source: Same as in Table 1

Table 10: Percentage of Primary NFE Centres According to Area and Management, 1993-94

State/UT	Government				Voluntary Agencies			
	Rural		Total		Rural		Total	
	Girls	Total	Girls	Total	Girls	Total	Girls	Total
Andhra Pradesh	37.03	15.56	38.92	17.01	30.67	15.53	31.05	16.16
Arunachal Pradesh	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00
Assam	5.72	7.74	5.57	7.42	1.87	1.59	1.84	1.57
Bihar	1.25	0.97	1.17	0.94	5.87	6.12	5.79	5.98
Goa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gujarat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Haryana	0.00	0.01	0.00	0.01	0.00	0.10	0.00	0.11
Himachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.06
J & K	0.32	1.00	0.29	0.95	0.27	0.47	0.26	0.46
Karnataka	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kerala	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.35
Madhya Pradesh	18.27	20.66	18.48	21.43	7.20	7.54	7.11	7.66
Maharashtra	0.32	0.39	0.31	0.38	4.80	3.50	4.74	3.48
Manipur	0.49	0.58	0.47	0.58	0.00	0.92	0.00	0.89
Megahalaya	0.00	0.52	0.00	0.50	0.00	0.61	0.00	0.60
Mizoram	0.13	0.08	0.12	0.08	0.27	0.02	0.26	0.08
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	8.98	7.65	8.62	7.41	17.07	35.09	16.84	34.52
Punjab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rajasthan	15.50	6.53	14.38	6.24	20.00	7.39	20.26	7.27
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tamil Nadu	0.08	0.05	0.08	0.06	0.80	0.63	0.79	0.63
Tripura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uttar Pradesh	11.79	38.16	11.23	36.84	11.20	19.93	11.05	19.61
West Bengal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A & N Islands	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
Chandigarh	0.11	0.03	0.33	0.09	0.00	0.00	0.00	0.00
D & N Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delhi	0.02	0.00	0.02	0.00	0.00	0.18	0.00	0.17
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Centres (All India)	4734	100073	5118	105592	375	6221	380	6373

Source: Computed by the author based on the information presented in NCERT (1998).

Note : Percentage to total centres (All India) is presented under centres run by Government and Voluntary Agencies.

Table 11: Percentage of Upper Primary NFE Centres According to Area and Management: 1993-94

	Government			Voluntary Agencies		
State/UT	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	58.22	61.18	58.58	31.54	25.93	31.24
Arunachal Pradesh	0.09	0.00	0.08	0.00	0.00	0.00
Assam	2.36	0.00	2.07	6.43	0.00	6.09
Bihar	0.93	0.00	0.81	2.90	0.00	2.75
Goa	0.00	0.00	0.00	0.00	0.00	0.00
Gujarat	0.00	0.00	0.00	0.00	0.00	0.00
Haryana	0.02	0.00	0.02	0.41	3.70	0.59
Himachal Pradesh	0.00	0.00	0.00	0.00	0.00	0.00
J & K	0.31	0.00	0.27	0.21	0.00	0.20
Karnataka	0.00	0.00	0.00	0.00	0.00	0.00
Kerala	0.00	0.00	0.00	0.21	18.52	1.18
Madhya Pradesh	23.29	32.75	24.44	10.58	25.93	11.39
Maharashtra	0.44	0.00	0.39	4.15	11.11	4.52
Manipur	0.88	1.60	0.97	1.45	0.00	1.38
Megahalaya	0.00	0.00	0.00	0.00	0.00	0.00
Mizoram	0.26	0.00	0.23	0.00	0.00	0.00
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	9.70	1.12	8.66	31.33	7.41	30.06
Punjab	0.00	0.00	0.00	0.00	0.00	0.00
Rajasthan	0.84	0.64	0.81	2.28	3.70	2.36
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00
Tamil Nadu	0.09	0.00	0.08	2.90	3.70	2.95
Tripura	0.00	0.00	0.00	0.00	0.00	0.00
Uttar Pradesh	2.53	0.64	2.30	4.77	0.00	4.52
West Bengal	0.00	0.00	0.00	0.00	0.00	0.00
A & N Islands	0.00	0.00	0.00	0.00	0.00	0.00
Chandigarh	0.04	2.08	0.29	0.00	0.00	0.00
D & N Haveli	0.00	0.00	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00
Delhi	0.00	0.00	0.00	0.83	0.00	0.79
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00
Total Centres (All India),No.	4538	626	5164	482	27	509

Source: Same as in Table 1.

Note : Percentage to total centres (All India) is presented under centres run by Government and Voluntary Agencies.

Based on the above discussion, one gets the impression that the non-formal education has not expanded well and reached to all potential areas and beneficiaries.

3.7 Instructors: Non-formal Education

The NFE centres distributed according to instructors and enrolment are presented in Table 12. The table reveals that the average size of a non-formal education (primary) centre in 1993-94 was about 27 learners. However, the number of instructors in a centre varied from no instructor to two and more instructors. It has been observed that the maximum number of centres - both primary (92.62 per cent) and upper primary (78.35 per cent) had one instructor. There were about 4,553 primary and 128 upper primary centres which respectively had an average enrolment of 26 and 36 learners but did not have an instructor. On the other hand, there were about 729 primary and 22 upper primary centres that had at least one instructor but did not have a learner. In addition, there were a few upper primary centres (18) which had more than two instructors but did not have a learner, thus indicating a lot of wastage and lack of seriousness in implementing the programme. Further, about 1,289 primary and 73 upper primary centres with average enrolment of 58 and 78 had even more than two instructors.

The distribution of centres further reveals that number of instructor(s) in a centre has nothing to do with the average number of learners it had. Even, 2,289 primary and 62 upper primary centres, which had an average enrolment of 50, had just one instructor. Similarly, 160 primary and 128 upper primary centres that had more than 50 learners did not have even a single instructor. Further, it has been noticed that the average size of a centre in 1993-94 was 21-30 learners, as the majority of centres fall within this category but as many as 2,306 primary and 33 upper primary centres did not have an instructor. All this reflects the mis-management of non-formal system and the type of education that is being imparted in the NFE centres; which have learners but do not have an instructor. Even, if the centre has an instructor that does not guarantee that it functions regularly and whether equivalent education to the formal system is being imparted. It is also of interest to know how many of the NFE learners over time transited to the formal system. With the limited set of data, it is not possible to gather any further information on this aspect.

Table 12: NFE Centres According to Instructors and Enrolment, All India: 1993-94

		Number of Centres According to Enrolment Slabs								
Level	No. of Instructors	Nil	1-10	11-20	21-30	31-40	41-50	More than 50	Total	Average Enrolment /Centre*
Primary	Zero	323	242	991	2306	408	123	160	4553	26
	One	729	2600	15946	68094	11429	2611	2289	103698	27
	Two	1	84	301	688	269	499	583	2425	45
	More than 2	8	88	247	449	115	36	346	**1289**	58
	Total	**1061**	**3014**	**17485**	**71537**	**12221**	**3269**	**3378**	**111965**	**27**
Upper Primary	Zero	20	9	42	33	11	6	7	128	36
	One	22	161	766	3008	378	48	62	4445	25
	Two	18	115	366	327	84	45	72	1027	25
	More than 2	0	5	15	17	4	6	26	73	78
	Total	**60**	**290**	**1189**	**3385**	**477**	**105**	**167**	**5673**	**26**

Source : Same as in Table 1.

* Computed by the author.

3.8 Enrolment: Non-formal Education

When enrolment in non-formal centres is compared with the corresponding enrolment in the formal system, it is too meager to have any significant impact both at the primary and upper primary levels of education. In order to see the contribution of NFE programmes to enrolment under the formal system, the percentage of enrolment in NFE centres (primary and upper primary centres) to total elementary enrolment (Grades I-VIII) has been worked out. While analysing enrolment data, it is noted that enrolment in NFE centres includes only those children who are of the age-group 6-14 years. However, it is not known from the existing set of data whether children below age-6 and above '14' are also included in NFE enrolment. If yes, what is its percentage to total enrolment? Since enrolment in formal schools is inclusive of both the over-age and under-age children, the percentage of enrolment in NFE centres to total enrolment may not present the true picture of its contribution to the formal system. Therefore, as an alternative, percentage of enrolment in NFE centres to corresponding age-specific population (6-14 years) has also been worked out and the same is presented in Table 13.

The percentage of learners in the Government run centres (primary and upper primary) to total elementary enrolment (Grades I-VIII) indicates that it is as small as 2.54 and 2.33 per cent respectively in case of girls and total enrolment. The enrolment in centres run by the Voluntary Agencies, even if added to this enrolment, will improve the percentage only to a marginal effect. Even the corresponding percentage to age-specific population (6-14 years) does not show any significant improvement, as it is only 3.05 and 3.22 per cent respectively in case of girls and total enrolment.

The State-wise results reveal that barring a few States, like Andhra Pradesh (7.90 per cent), Arunachal Pradesh (7.08 per cent), Madhya Pradesh (7.41 per cent), Manipur (10.51 per cent), Rajasthan (3.87 per cent), Uttar Pradesh (6.36 per cent) and Chandigarh (4.22 per cent), all other States have a lower percentage of NFE enrolment than the All-India average of 3.22 per cent. The percentage in case of Andhra Pradesh, Madhya Pradesh, Rajasthan and Uttar Pradesh is termed impressive and is attributed to the large number of dropout and out-of-school children in these States. The achievement is also significant in view of only a few NFE centres and a large number of unserved habitations and villages in these States. In as many as nine States, since the NFE centres are not in existence, the entire responsibility of imparting education rests with the formal system. Such States are Karnataka, Nagaland, Punjab, Sikkim, Tripura, West Bengal, Dadra and Nagara Haveli, Daman & Diu, and Pondicherry. Kerala too had only a few NFE centres and its contribution to total elementary enrolment is negligible (0.07 per cent); this may be due to the fact that the State has almost achieved the goal of universal enrolment through the formal system of education.

4. SCHOOLING FACILITIES, PUPIL-TEACHER RATIO AND TRANSITION RATES

4.1 Ratio of Primary to Upper Primary Schools

The ratio of primary to upper primary schools during the period 1950-51 to 1997-98 at the All-India level is presented in Table 14. The table reveals that the ratio has considerably improved from 15.4 in 1950-51 to 3.9 in 1985-86; thereafter it has established at about 3.3 which is still above the policy directive of 1:2. Keeping in view the impressive growth in number of primary schools during the period 1950-51 to 1997-98, the ratio indicates that during the last few years both the primary and upper primary schools have increased almost at the same pace (Varghese and Mehta, 1999a). However, in a number of States, the ratio is higher than at the All-India level.

The State-wise ratio is presented in Table 15. It is observed that across the States, the ratio during the period 1986-87 to 1993-94 has declined but in most of the States, it is still above 1:2. Compared to primary schools, West Bengal has the least number of upper primary schools and the ratio is as high as 16.4; this indicates that on an average there is only one upper primary school for every 16 primary schools. Andhra Pradesh (7.7), Bihar (3.8), Himachal Pradesh (7.0), Madhya Pradesh (4.5), Tamil Nadu (5.4) and Uttar Pradesh (4.5), are amongst the other few States which also had the ratio higher than the national average. On the other hand, Gujarat, Karnataka, Kerala, Maharashtra, Mizoram, Chandigarh and Pondicherry had a upper primary school for every two primary schools it had in 1993-94.

The results indicate that despite significant improvement in both the percentage habitations and rural population served by the schooling facilities, the ratio of primary to upper primary schools, both at the All-India and State level, is still quite high. This indicates that more upper primary schools are required to be provided, so that the ratio is settled somewhat near to 1:2. The number of unserved habitations presented above also supports this.

Table 13 : Percentage of NFE Learners (Primary & Upper Primary) to Total Elementary Enrolment, 1993-94

State/UT	Government+Voluntary Agencies		Government		Government+Voluntary Agencies	
	% of Total Enrolment		% of Total Enrolment		% of ASP (6-14 Yrs.)	
	Girls	Total	Girls	Total	Girls	Total
Andhra Pradesh	6.87	6.61	6.45	6.26	7.46	7.96
Arunachal Pradesh	0.68	0.65	0.68	0.65	1.01	1.08
Assam	7.63	7.34	7.50	7.20	8.73	9.08
Bihar	0.74	0.54	0.53	0.40	0.47	0.49
Goa	0.05	0.04	0.05	0.04	0.07	0.07
Gujarat	0.33	0.31	0.18	0.17	0.43	0.45
Haryana	0.21	0.24	0.18	0.21	0.23	0.29
Himachal Pradesh	0.02	0.02	0.00	0.00	0.03	0.03
J & K	2.23	2.04	2.16	1.96	1.74	2.07
Karnataka	0.00	0.00	0.00	0.00	0.00	0.00
Kerala	0.04	0.04	0.01	0.01	0.07	0.07
Madhya Pradesh	6.47	5.79	6.32	5.66	6.99	7.41
Maharashtra	0.09	0.11	0.06	0.07	0.14	0.19
Manipur	6.21	5.74	5.52	5.13	10.95	10.51
Megahalaya	3.21	3.29	2.94	3.03	5.49	5.58
Mizoram	1.00	1.01	0.95	0.97	1.98	2.07
Nagaland	0.00	0.00	0.00	0.00	0.00	0.00
Orissa	5.57	5.38	4.24	4.14	6.05	6.90
Punjab	0.00	0.00	0.00	0.00	0.00	0.00
Rajasthan	5.92	3.49	5.53	3.25	4.23	3.87
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00
Tamil Nadu	0.10	0.10	0.03	0.03	0.20	0.21
Tripura	0.00	0.00	0.00	0.00	0.00	0.00
Uttar Pradesh	7.80	6.24	7.57	6.04	6.01	6.36
West Bengal	0.00	0.00	0.00	0.00	0.00	0.00
A & N Islands	0.66	0.56	0.66	0.56	1.16	1.06
Chandigarh	3.52	2.79	3.52	2.79	5.22	4.22
D & N Haveli	0.00	0.00	0.00	0.00	0.00	0.00
Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00
Delhi	0.23	0.20	0.19	0.15	0.41	0.34
Lakshadweep	0.00	0.00	0.00	0.00	0.00	0.00
Pondicherry	0.00	0.00	0.00	0.00	0.00	0.00
All India	2.72	2.49	2.54	2.33	3.05	3.22

ASP: Age-specific population.

Source: Computed by the author based on NCERT (1998).

Table 14: Number of Schools, All India, 1950-51 to 1997-98

Number of Schools			
Year	Primary	Middle	Ratio of Primary to Middle Schools
1950-51	209671	13596	15.4
1955-56	278135	21730	12.8
1960-61	330399	49663	6.7
1965-66	391064	75798	5.2
1970-71	408378	90621	4.5
1975-76	454270	106571	4.3
1980-81	494503	118555	4.2
1985-86	528872	134846	3.9
1990-91	560935	151456	3.7
1991-92	566744	155926	3.6
1992-93	572541	153921	3.7
1993-94	572923	155707	3.7
1994-95	581306	163605	3.6
1995-96	590421	171216	3.4
1996-97	598354	176772	3.4
1997-98	611000	186000	3.3

Source: Varghese and Mehta (1999a).

4.2 Female Teachers and Pupil-Teacher Ratio

The percentage of female teachers and pupil-teacher ratio both at the primary and upper primary levels of education are presented in Table 16. Over a period of time, the number of female teachers at the primary level has improved significantly but the same is not true in case of teachers at the upper primary level. The percentage of female teachers at the upper primary level has in fact declined to 32.8 in 1993-94 from 35.1 in 1986-87. However in many States, the percentage has improved significantly but still male teachers out-number their female counterparts; difference between the two is wide and significant.

The State-wise percentage of female teachers at the primary level reveals that in a few States, such as Goa (63.81 per cent), Kerala (67.27 per cent) and Chandigarh (93.35 per cent), there are more female teachers than the male teachers, but the same (except Chandigarh) is not true in case of upper primary level. On the other hand, in Bihar, Madhya Pradesh, Orissa, Uttar Pradesh (except primary level) and West Bengal, the percentage of female teachers, both at the primary and upper primary levels of education, is lower than 25 which indicates need of providing more female teachers in these States.

Table 15: Ratio of Primary to Upper Primary Schools and Average Number of Teachers in Schools, State-Wise

State/UT	Primary Schools		Upper Primary Schools		Ratio		Average Number of Teachers			
							Primary		Upper Primary	
	1986-87	**1993-94**	**1986-87**	**1993-94**	**1986-87**	**1993-94**	**1986-87**	**1993-94**	**1986-87**	**1993-94**
Andhra Pradesh	44346	49194	5647	6418	7.9	7.7	2.2	2.2	7.0	5.8
Arunachal	952	1166	182	284	5.2	4.1	2.0	2.2	7.0	6.7
Assam	25873	28822	4991	7138	5.2	4.0	2.2	2.4	5.9	6.5
Bihar	51377	52674	12211	13765	4.2	3.8	2.2	2.1	7.4	7.3
Goa	993	1029	123	116	8.1	8.9	2.9	2.8	9.1	7.4
Gujarat	12709	13588	16192	18151	0.8	0.7	2.5	2.3	7.6	7.5
Haryana	4849	5143	1161	1487	4.2	3.5	3.3	3.3	9.4	8.6
H. P	6904	7732	1020	1105	6.8	7.0	2.4	3.0	5.5	5.7
J & K	7466	9057	2196	2648	3.4	3.4	1.6	1.9	7.1	7.2
Karnataka	23023	22128	14969	18263	1.5	1.2	1.6	2.0	6.3	5.6
Kerala	6096	6701	3547	2927	1.7	2.3	8.2	7.6	15.6	18.3
M. P	64089	72730	12692	16237	5.0	4.5	2.5	2.5	5.8	5.4
Maharashtra	38094	41292	16919	18908	2.3	2.2	3.0	3.3	8.1	8.1
Manipur	2757	3027	436	702	6.3	4.3	3.2	3.5	8.4	10.2
Megahalaya	3692	4099	665	816	5.6	5.0	1.8	2.1	4.5	4.8
Mizoram	1005	978	463	610	2.2	1.6	3.3	3.9	5.7	6.5
Nagaland	1131	1305	291	307	3.9	4.3	4.7	4.9	10.1	10.6
Orissa	34178	37239	8271	10420	4.1	3.6	2.2	2.4	4.3	3.9
Punjab	12838	13085	1445	1455	8.9	9.0	3.7	3.5	7.4	5.9
Rajasthan	28103	33271	8334	10122	3.4	3.3	2.2	2.7	8.3	7.8
Sikkim	468	532	121	115	3.9	4.6	4.4	5.1	12.8	13.3
Tamil Nadu	29268	30329	5666	5593	5.2	5.4	3.9	3.8	11.3	11.1
Tripura	1927	2029	419	434	4.6	4.7	3.9	4.5	8.7	12.3
Uttar Pradesh	75564	86426	17335	19145	4.4	4.5	3.5	3.5	5.7	5.3
West Bengal	48456	48841	3127	2976	15.5	16.4	3.4	3.3	7.3	6.4
A & N Islands	177	187	40	44	4.4	4.3	3.5	4.0	14.5	16.4
Chandigarh	44	43	31	29	1.4	1.5	8.5	9.4	15.2	14.7
D & N Haveli	124	125	36	43	3.4	2.9	1.4	1.6	9.4	9.7
Daman & Diu	32	45	16	19	2.0	2.4	5.7	6.6	9.9	7.6
Delhi	1838	1962	366	505	5.0	3.9	10.0	11.2	13.2	15.0
Lakshadweep	18	19	4	4	4.5	4.8	10.3	13.6	28.5	44.0
Pondicherry	339	337	100	120	3.4	2.8	5.1	5.3	14.2	13.9
All India	528730	575135	139016	160906	3.8	3.6	2.8	2.9	7.2	6.9

Source: Calculated by the author based on information presented in NCERT (1992 and 1998).

Table 16: Pupil-Teacher Ratio and Percentage of Female Teachers

State/UT	Primary Level				Upper Primary Level			
	P-T Ratio		% of Female Teachers		P-T Ratio		% of Female Teachers	
	1986-87	1993-94	1986-87	1993-94	1986-87	1993-94	1993-94	1986-87
Andhra Pradesh	44	50	28.04	31.56	24	44	36.45	32.58
Arunachal	34	36	17.34	23.01	17	23	20.92	17.88
Assam	36	39	25.59	28.84	30	30	17.88	19.14
Bihar	60	53	17.46	20.03	25	44	22.16	18.33
Goa	29	21	58.99	63.81	37	39	58.14	53.83
Gujarat	61	45	39.03	38.70	21	42	46.86	43.78
Haryana	53	49	41.25	46.24	40	39	40.42	40.49
Himachal Pradesh	38	26	35.59	39.86	29	24	24.16	19.85
J & K	33	24	38.07	38.85	19	24	39.73	34.26
Karnataka	48	50	26.12	32.64	33	59	45.31	39.7
Kerala	40	32	62.12	67.27	30	31	64.61	58.93
Madhya Pradesh	39	46	21.62	24.76	29	37	27.72	24.74
Maharashtra	42	83	38.22	39.03	37	27	38.71	37.29
Manipur	17	18	21.43	30.49	16	16	33.14	21.95
Megahalaya	37	37	39.96	46.18	21	18	37.78	37.02
Mizoram	27	30	44.40	46.16	13	15	22.27	21.16
Nagaland	20	19	29.90	34.00	15	19	27.43	21.56
Orissa	39	36	15.67	23.07	31	32	17.71	12.09
Punjab	40	38	54.03	58.46	39	22	44.33	40.90
Rajasthan	55	47	23.42	27.14	18	34	24.46	22.87
Sikkim	15	14	29.60	34.08	17	19	32.26	31.46
Tamil Nadu	56	49	39.31	41.07	37	51	48.06	49.45
Tripura	36	37	21.86	22.39	29	24	22.68	22.56
Uttar Pradesh	41	59	21.27	25.26	35	39	21.26	19.44
West Bengal	41	51	20.44	23.03	41	61	25.96	21.50
A & N Islands	31	23	32.85	39.49	26	22	50.69	45.94
Chandigarh	28	40	90.91	93.35	31	23	90.59	88.32
D & N Haveli	35	41	38.86	35.03	27	33	56.35	51.83
Daman & Diu	41	36	45.36	54.24	36	28	41.67	36.71
Delhi	34	32	56.67	59.93	31	21	51.90	60.57
Lakshadweep	28	31	29.73	31.27	18	25	30.68	48.25
Pondicherry	34	29	41.93	50.81	29	30	49.28	38.86
All India	44	50	28.20	31.41	29	38	35.08	32.80

Source: NCERT (1992) and MHRD (Selected Statistics for the Year 1993-94).

The trend in pupil-teacher ratio indicates that both at the primary and upper primary levels of education, the ratio has increased significantly from 44 and 29 in 1986-87 to 50 and 38 in the year 1993-94. It may however be noted that since the full set of the NCERT data on teachers is not available, the corresponding ratio for the year 1993-94 has been obtained from the MHRD sources.

The State-wise pupil-teacher ratio at the primary level reveals that they have different patterns and the ratio varies between 18 in Manipur to 53 in Bihar. A large number of States had a lower ratio than at the All-India level; such States are Assam, Gujarat, Kerala, Madhya Pradesh, Orissa, Punjab, Rajasthan and Tamil Nadu. On the other hand, Andhra Pradesh, Bihar, Gujarat, Karnataka, Tamil Nadu, Uttar Pradesh and West Bengal were amongst the few States that had a higher pupil-teacher ratio at the upper primary level than at the All-India level. It has also been noticed that in a few States, such as Assam, Kerala, Madhya Pradesh, Orissa, Punjab and Rajasthan, the pupil-teacher ratio, both at the primary and upper primary levels of education, is lower than at the All-India level. The increased ratio during 1986-87 to 1993-94 indicates that enrolment at the upper primary level has started increasing but since the corresponding number of teachers has not increased at the same pace, the ratio is also showing an increasing trend.

The average number of teachers in 1993-94 reveals that on an average, a primary school had 2.9 teachers compared to 6.9 teachers in an upper primary school (Table 15). The State-wise average number of teachers shows that the majority of the States have more than two teachers but still there are States, like Jammu & Kashmir and Dadra and Nagara Haveli, which have less than average of two teachers in a primary school. In fact, there may be a large number of single teacher primary schools but it is not reflected in the aggregated data presented above. The number of teachers in primary schools suggest that teachers are involved in multi-grade teaching but the same is not true in case of the upper primary teachers. This is also supported by the study conducted by Varghese and Mehta (1999a & b).

Composite Index of Access

To judge the position of different States with respect to availability of schooling facilities, a composite rank index of indicators of access is constructed. Four basic indicators, namely, percentage of rural habitations having population of 300 and more and served by primary schooling facilities, percentage of habitations having population of 500 and more and served by upper primary schooling facilities, percentage of population served by primary schools/sections and upper primary schooling facilities within a distance of one and three kilometres have been considered. It may be noted that only major States are considered in constructing the index that is then used to identify educationally advanced and backward States with respect to schooling facilities.

The composite index reveals a divergent picture of schooling facilities. States like, Gujarat, Haryana, Goa, Punjab, Tamil Nadu, Karanataka, Orissa and Bihar are far ahead of the rest of the States and can be considered as educationally advanced States. Surprisingly, Orissa and Bihar, the two educationally backward States are well placed

with respect to schooling facilities. In these States, a vast majority of both the habitations and rural population is accessed to primary as well as upper primary schooling facilities. However, a large number of schools in Orissa are damaged in the recent super cyclone, which need immediate attention of planners. It may also be noted that availability of a school in a habitation need not guarantee that it has the minimum infrastructure required for smooth functioning of school and the utilisation of available facilities is also not guaranteed. This is evident from the survey data on physical facilities that indicate that many schools do not have buildings and other ancillary facilities. As many as 21,858 of the total 5,70,455 primary schools in 1993-94 were functioning either in an open space or in tents. Only 65 per cent primary schools had a pucca building. Only 44 per cent schools in 1993-94 had drinking water facility as against 19 per cent having urinal facility in school. Only 11 per cent primary schools had urinal facilities separately for girls.

On the other hand, States like Tripura, Assam, Himachal Pradesh, Madhya Pradesh, Nagaland, Rajasthan, Megahalaya, Uttar Pradesh, Sikkim and Arunachal Pradesh can be considered educationally backward States, as the majority of habitations and considerable size of rural population in these States are not accessed to schooling facilities. States, like Madhya Pradesh, Rajasthan and Uttar Pradesh may be termed crucial, as a vast majority of out of school children come from these States. Maharashtra, Mizoram, Manipur, Andhra Pradesh, Jammu & Kashmir, Kerala, and West Bengal can be considered as average States. Kerala in this group is strange, as the State has almost achieved the goal of universal enrolment.

Needless to mention that the grouping of States under different categories in this article is based upon the indicators of access. Unless, indicators of facilities, enrolment and retention are considered in developing a composite indicator, the placement of a State in a group may be treated purely tentative in nature.

4.4 Transition Rate

The transition rate at the All-India level during the period 1970-71 to 1990-91 and State level for the year 1990-91 is presented in Tables 17 and 18. So far as the computation of transition rate is concerned, the procedure followed is that first the repeaters are taken out from enrolment in the first grade of upper primary cycle which is then divided by the terminal grade of previous cycle, that is primary level. However, from the existing set of data, it is not possible to know exactly how many children successfully completed Grade V and then took admission in Grade VI next year. Thus, the existing sets of transition rates do not present the true picture of transition from one stage to another. It may be recalled that States have different patterns so far as the composition of primary and upper primary cycles are concerned (Table 18). Except Assam, Goa, Gujarat, Karanataka, Kerala, Maharashtra, Meghalaya, Mizoram, Nagaland, Dadra & Nagara Haveli, and Lakshadweep, all other States have Grades I-V and VI-VIII respectively at the primary and upper primary levels. These States have Grades I-IV and V-VII.

Table 17: Transition Rate (%), All India, 1970-71 to 1990-91

Year	Transition Rate (%)			
	Boys	Girls	Total	Boys/Girls Differential
1970-71	86.80	74.08	82.56	12.72
1975-76	87.99	78.34	84.58	9.65
1980-81	92.11	81.77	88.35	10.34
1985-86	90.79	82.01	87.45	8.78
1990-91	95.20	93.22	94.42	1.98

Source: Varghese and Mehta (1999a).

While analysing transition from primary to upper primary level, it has been observed that in a number of States, the transition rate is noticed to be higher than hundred. This by logic is not possible, as enrolment in Grade VI cannot be more than the enrolment in Grade V the previous year. This could be possible only if some new students from outside the State have joined upper primary stream. But keeping in view the size of deviation, the same may not be the only reason of this discrepancy. In West Bengal, enrolment in Grade VI in 1991-92 was 274 thousand (73.60 per cent) more than the enrolment in Grade V the previous year. Further, it has been observed that the States that have high transition rate (more than 100) for boys too, have a higher transition rate for girls. Such States are Goa, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Nagaland, West Bengal, Chandigarh, Delhi and Pondicherry. Except West Bengal, most of these States are smaller in size; hence a marginal over reporting of enrolment may results into transition rate higher than hundred.

The transition rate at the All-India level reveals that over a period of time, it has improved to a significant effect (Varghese & Mehta, 1999a). This is also reflected in boys/girls differential which has been considerably declined during the same period. The transition rate from primary to upper primary level, which was 82.56 per cent in 1970-71, improved to 84.58 per cent in 1975-76 and further to 94.42 per cent in the year 1990-91 (Table 17). The results further reveal that a little less than 18 per cent children, who were in Grade V in 1970-71, dropped out from the system in transition which in absolute terms comes out to be 1,126 thousand; girl's contribution was to the tune of 566 thousand (50 per cent). In the latest year 1990-91, the corresponding figures are 787 thousand (total) and 381 thousand (girls).

Table 18: State-Wise Transition Rate, 1990-91

State/UT	Composition		Enrolment (1990-91) IV/V		Enrolment (1991-92) V/VI		Transition Rate (%)	
	Primary	Middle	Girls	Total	Girls	Total	Girls	Total
Andhra Pradesh	I-V	VI-VIII	410552	1017593	341553	890797	83.19	87.54
Arunachal Pradesh	I-V	VI-VIII	5232	12643	4525	11423	86.49	90.35
Assam	I-IV	V-VII	185257	428226	181810	460363	98.14	107.50
Bihar	I-V	VI-VII	333194	1056792	244256	834695	73.31	78.98
Goa	I-IV	V-VII	12815	27203	13505	29451	105.38	108.26
Gujarat	I-IV	V-VII	392806	956137	343194	845061	87.37	88.38
Haryana	I-V	VI-VIII	115135	285340	108073	272697	93.87	95.57
Himachal Pradesh	I-V	VI-VIII	50488	108610	53670	120335	106.30	110.80
J & K	I-V	VI-VIII	45569	97996	52098	129662	114.33	132.31
Karnataka	I-IV	V-VII	450565	1012898	361833	809568	80.31	79.93
Kerala	I-IV	V-VII	311823	643550	311871	646863	100.02	100.51
Madhya Pradesh	I-V	VI-VIII	438658	1165588	310611	953455	70.81	81.80
Maharashtra	I-IV	V-VII	792187	1747705	732471	1677351	92.46	95.97
Manipur	I-V	V-VII	13672	30325	15536	34194	113.63	112.76
Meghalaya	I-IV	V-VII	12716	26847	12791	26896	100.59	100.18
Mizoram	I-IV	V-VII	7881	16589	7486	15685	94.99	94.55
Nagaland	I-IV	V-VIII	11238	24252	11336	22988	100.87	94.79
Orissa	I-V	VI-VIII	214048	523804	194249	463142	90.75	88.42
Punjab	I-V	VI-VIII	154362	335006	147574	336581	95.60	100.47
Rajasthan	I-V	VI-VIII	155387	580285	138124	575421	88.89	99.16
Sikkim	I-V	VI-VIII	4875	10093	3284	6810	67.36	67.47
Tamil Nadu	I-V	VI-VIII	631906	1404202	532536	1245618	84.27	88.71
Tripura	I-V	VI-VIII	20307	454408	20206	46171	99.50	10.16
Uttar Pradesh	I-V	VI-VIII	552813	1772454	441209	1645487	79.81	92.84
West Bengal	I-V	VI-VIII	463224	1229813	804423	1737321	173.66	141.27
A & N Islands	I-V	VI-VIII	3381	7387	3138	7031	92.81	95.18
Chandigarh	I-V	VI-VIII	4337	9219	4669	10190	107.66	110.53
D & N Haveli	I-IV	V-VII	1059	2800	801	2152	75.64	76.86
Daman & Diu	I-V	VI-VIII	1261	2889	1083	2320	85.88	80.30
Delhi	I-V	VI-VIII	72811	156327	82808	192043	113.73	122.85
Lakshadweep	1-IV	V-VII	845	1842	755	1624	89.35	88.17
Pondicherry	I-V	VI-VIII	9614	20126	9985	21258	103.86	105.62

Source: Calculated by the author on the basis of information presented in the MHRD documents, different years.

A perusal of State-wise rates reveals that transition from primary to upper primary level, irrespective of the States, is noticed to be higher than 75 per cent (except Sikkim).

Between upper primary grades, the transition is also found to be very high in four districts that were surveyed recently by Varghese and Mehta (1999b). The educationally backward States had a mix of high and very high transition rates in 1990-91. Andhra Pradesh (87.54 per cent), Madhya Pradesh (81.80 per cent), Orissa (88.42 per cent), Rajasthan (99.16 per cent) and Uttar Pradesh (92.84 per cent) had comparatively a high transition rate than Bihar (78.98 per cent). In Bihar, about 133 thousand boys and 89 thousand girls dropped out from the system in transition. Kerala that had shown almost a consistent enrolment both in the ratio and absolute form for the last more than 25 years also had a very high transition rate for both boys and girls.

The improving transition rates across the States indicate more demand for upper primary education in years that follow. The demand is likely to further increase with expansion of primary education. An inefficient primary education system will transit fewer primary graduates to upper primary stream, as the efficiency of primary system has a direct impact on the upper primary system.

5. ENROLMENT

Since universal enrolment is the most important component of UEE, a detailed analysis of growth of enrolment is undertaken. Needless to mention that the analysis is carried out separately at the primary and upper primary levels of education and for girls and total enrolment. Since the previous NCERT survey was conducted in 1986-87 and the latest one in the year 1993-94, the growth of enrolment is measured between the period 1986-87 and 1993-94. In addition, out-of-school children and additional enrolment required to achieve the goal of universal enrolment, is also computed. For this purpose, first enrolment at different levels of education in 1993-94 is refined at the flat rate of 15 per cent (Mehta, 1995). The refined enrolment is then deducted from the corresponding age-specific population to obtain out-of-school children in 1993-94. So far as net additional enrolment is concerned, first additional enrolment within a particular age-group is obtained simply by subtracting refined enrolment from the age-specific population in 2001. The additional enrolment out-side the prescribed age-group is obtained by taking 15 per cent of the enrolment required within the age-group. This is then added to the enrolment required within the age-group to obtain net additional enrolment (including over-age and under-age children) that would be required in 2001 to obtain the goal of universal enrolment (Mehta, 1997). The requisite percentages from the 1993-94 enrolment level have also been worked out.

5.1 Growth of Enrolment

The annual rate of growth calculated between the period 1986-87 and 1993-94 (Table 19) shows that at the All-India level, girls' enrolment increased at much faster rate than boys' enrolment. This is true for both primary and upper primary levels of education. The boys' enrolment at the elementary level increased at the rate of 1.51 per cent per annum compared to 3.16 per cent girls' enrolment. Similarly, percentage increase in girls enrolment at the elementary level in 1993-94 was more than 21 compared to 11 in

boys enrolment (Table 20). The high percentage increase and annual rates have resulted due to low enrolment of girls and comparatively high enrolment of boys in the base year 1986-87.

Table 19 : Annual Rate of Growth of Enrolment between the Period 1986-87 to 1993-94

(In Per Cent)

State/UT	Classes I-V		Classes VI-VIII		Classes I-VIII		
	Girls	Total	Girls	Total	Boys	Girls	Total
Andhra Pradesh	2.62	1.79	5.07	3.43	1.44	3.08	2.14
Arunachal Pradesh	6.29	5.19	10.19	9.25	5.20	6.96	5.93
Assam	2.20	1.58	4.69	3.49	1.45	2.77	2.03
Bihar	2.40	1.33	2.85	1.02	0.68	2.48	1.27
Goa	-1.60	-1.78	0.25	0.04	-1.29	-0.97	-1.14
Gujarat	1.65	1.14	4.52	3.68	1.36	2.31	1.77
Haryana	3.66	2.10	7.24	3.39	1.05	4.57	2.49
Himachal Pradesh	1.88	1.26	4.00	2.26	0.81	2.52	1.58
J & K	3.46	2.32	4.24	2.16	1.35	3.67	2.28
Karnataka	3.08	2.54	5.47	4.44	2.49	3.60	2.99
Kerala	-0.46	-0.49	2.40	2.38	0.50	0.56	0.53
Madhya Pradesh	3.98	2.44	7.04	3.63	1.60	4.53	2.71
Maharashtra	2.19	1.61	4.88	3.37	1.46	2.85	2.08
Manipur	6.29	6.00	7.38	6.28	5.66	6.58	6.08
Meghalaya	1.49	1.45	1.76	1.91	1.54	1.55	1.54
Mizoram	1.58	1.65	4.87	5.01	2.50	2.36	2.43
Nagaland	0.79	0.59	7.57	6.11	1.38	2.18	1.76
Orissa	3.25	2.64	4.52	3.32	2.27	3.49	2.78
Punjab	0.42	0.15	3.46	2.49	0.47	1.26	0.83
Rajasthan	4.86	2.25	7.07	3.76	1.53	5.24	2.58
Sikkim	0.74	0.04	4.48	3.34	0.07	1.52	0.73
Tamil Nadu	1.40	1.30	5.48	4.43	1.94	2.47	2.18
Tripura	2.26	1.88	2.38	1.52	1.41	2.29	1.80
Uttar Pradesh	3.71	2.39	4.82	2.11	1.48	3.96	2.32
West Bengal	3.12	2.34	4.50	3.33	1.90	3.40	2.55
A & N Islands	3.70	3.33	3.65	2.98	2.83	3.68	3.23
Chandigarh	3.51	3.18	4.67	4.63	3.49	3.92	3.69
D & N Haveli	3.89	4.10	3.76	4.88	4.52	3.87	4.26
Daman & Diu	-1.37	-1.27	3.35	2.31	-0.31	0.04	-0.15
Delhi	6.06	5.16	7.61	6.97	5.09	6.60	5.79
Lakshadweep	0.56	0.78	4.93	3.70	1.52	1.74	1.62
Pondicherry	2.17	2.36	7.40	5.74	3.20	3.84	3.50
All India	2.66	1.86	4.86	3.22	1.54	3.16	2.20

Source : Computed by the author based on information presented in NCERT, 1992 and 1998.

Table 20 : Percentage Increase in Enrolment over the Period 1986-87 to 1993-94

State/UT	Classes I-V		Classes VI-VIII		Classes I-VIII		
	Girls	Total	Girls	Total	Boys	Girls	Total
Andhra Pradesh	19.84	13.26	41.32	26.59	10.55	23.65	16.01
Arunachal Pradesh	53.28	42.52	97.23	85.80	42.60	60.17	49.63
Assam	16.46	11.56	37.86	27.14	10.57	21.05	15.07
Bihar	18.07	9.73	21.72	7.35	4.87	18.67	9.25
Goa	-10.71	-11.82	1.78	0.28	-8.69	-6.59	-7.71
Gujarat	12.13	8.25	36.29	28.82	9.92	17.30	13.03
Haryana	28.57	15.68	63.10	26.32	7.56	36.74	18.76
Himachal Pradesh	13.94	9.15	31.58	16.93	5.83	19.05	11.63
J & K	26.89	17.43	33.70	16.17	9.83	28.72	17.06
Karnataka	23.68	19.22	45.16	35.51	18.79	28.12	22.88
Kerala	-3.21	-3.40	18.07	17.86	3.56	4.02	3.79
Madhya Pradesh	31.38	18.42	61.05	28.39	11.76	36.39	20.62
Maharashtra	16.36	11.82	39.55	26.10	10.67	21.71	15.48
Manipur	53.27	50.40	64.57	53.19	46.98	56.23	51.17
Meghalaya	10.92	10.58	13.00	14.14	11.28	11.33	11.31
Mizoram	11.60	12.15	39.51	40.81	18.88	17.75	18.34
Nagaland	5.64	4.20	66.66	51.48	10.11	16.29	12.99
Orissa	25.07	19.98	36.25	25.68	17.03	27.13	21.16
Punjab	2.95	1.04	26.86	18.78	3.35	9.15	5.94
Rajasthan	39.42	16.82	61.29	29.52	11.22	42.95	19.55
Sikkim	5.28	0.27	35.92	25.89	0.51	11.11	5.25
Tamil Nadu	10.20	9.44	45.28	35.45	14.38	18.63	16.27
Tripura	16.95	13.96	17.90	11.16	10.29	17.16	13.32
Uttar Pradesh	29.07	17.96	39.02	15.77	10.83	31.21	17.39
West Bengal	24.00	17.54	36.07	25.73	14.09	26.34	19.28
A & N Islands	28.95	25.80	28.53	22.83	21.54	28.83	24.88
Chandigarh	27.34	24.53	37.62	37.25	27.14	30.89	28.87
D & N Haveli	30.66	32.46	29.47	39.60	36.23	30.43	33.89
Daman & Diu	-9.22	-8.56	25.92	17.30	-2.15	0.29	-1.03
Delhi	50.95	42.21	67.11	60.24	41.55	56.39	48.30
Lakshadweep	3.97	5.61	40.06	29.00	11.14	12.80	11.90
Pondicherry	16.19	17.75	64.80	47.77	24.65	30.16	27.19
All India	20.17	13.77	39.36	24.86	11.31	24.31	16.44

Source: Same as in previous Table.

A perusal of State-wise rates reveals that irrespective of the educational level, most of the States experienced a high rate of growth in enrolment. However, a negative growth in primary enrolment is noticed in case of Goa, Kerala and Daman & Diu, which may be attributed to decline in the corresponding age-specific population.

At the elementary level, a number of States experienced a lower percentage increase in enrolment than at the All-India level. However, the increase in enrolment in case of Haryana (18.76 per cent), Karnataka (22.66 per cent), Madhya Pradesh (20.62 per cent), Manipur (51.17 per cent), Orissa (21.16 per cent), Rajasthan (19.55 per cent), Dadra & Nagara Haveli (33.89 per cent), and Delhi (40.90 per cent) is significant and higher than the All-India average of 16.11 per cent. Like All-India level, these States also experienced a higher increase in girls' enrolment than the increase in boys' enrolment and the difference between the two is significant. Further, it is also noticed that the rate of growth and percentage increase in enrolment is higher at the upper primary level than the increase at the primary level, which is in the line of transition rates presented above.

The annual rate of growth and percentage increase in enrolment analysed above are useful to know whether enrolment over time has an increasing or declining trend and at what rate or how many percentage points, it has increased or declined. However, it fails to provide an idea about coverage of child population and out-of-school children. This can be obtained, if enrolment is linked to the corresponding age-specific population and basic indicators, like enrolment ratio are computed.

A perusal of Table 21 reveals that gross enrolment ratio between the period 1986-87 and 1993-94 improved significantly but the same is still not adequate to attain the status of universal enrolment, if over-age and under-age children are taken out from enrolment. However, it may be noted that as we approach UPE, the percentages of over-age and under-age children, as well as the enrolment ratio (gross) will decline. The overall enrolment ratio increased from 91.69 in 1986-87 to 95.90 in the year 1993-94 and that of girls, during the same period, improved from 71.56 to 85.02 per cent. However, despite the significant improvement in transition rates, the corresponding figures at the upper primary level improved from 57.95 to only 59.07 per cent. It has also been noticed that boys/girls differential in enrolment ratio remained almost static (11.00 per cent). Unless all the girls are brought under the umbrella of education, the goal of universal enrolment is not likely to be realised in the near future. The analysis of enrolment ratio further reveals that across States, a significant progress has been made. Barring a few States, such as Goa, Maharashtra, Mizoram, Delhi, Lakshadweep, and Pondicherry, the enrolment ratio in 1993-94 was very low. Tamil Nadu had a very high enrolment ratio both at the primary (143.50 per cent) and upper primary (103.38 per cent) levels of education, thus clearly indicating high incidence of over-age and under-age children.

Table 21 : State-Wise Gross Enrolment Ratio (%) : 1986-87 and 1993-94

State/UT	Primary Level				Upper Primary Level			
	Girls		Total		Girls		Total	
	1986-87	1993-94	1986-87	1993-94	1986-87	1993-94	1986-87	1993-94
Andhra Pradesh	80.01	86.5	92.03	93.27	24.75	39.89	34.55	49.2
Arunachal Pradesh	78.10	119.87	94.70	130.96	26.89	48.43	34.43	55.95
Assam	81.21	86.57	90.10	92.88	39.15	48.59	45.09	53.37
Bihar	52.77	53.16	79.13	73.06	16.12	19.86	29.93	32.87
Goa	127.22	102.68	133.13	104.26	96.07	93.74	103.18	99.58
Gujarat	95.31	96.42	107.86	105.65	44.15	56.73	54.77	67.74
Haryana	77.61	80.58	87.35	83.78	39.89	58.36	59.31	68.56
Himachal Pradesh	92.59	100.17	99.41	110.13	64.79	85.58	79.28	100.02
J & K	67.25	56.19	79.96	71.71	41.73	41.32	56.62	55.69
Karnataka	98.69	114.09	108.33	119.23	41.83	59.31	51.49	66.95
Kerala	104.59	95.33	105.67	96.14	88.09	100.48	88.28	100.55
Madhya Pradesh	76.33	86.54	96.86	97.98	24.24	39.43	43.79	54.96
Maharashtra	107.22	114.65	116.70	118.76	51.71	72.96	64.84	81.58
Manipur	86.91	127.64	93.50	131.88	52.99	75.18	60.49	76.89
Meghalaya	107.08	136.72	108.61	134.29	49.20	53.77	51.51	53.76
Mizoram	118.45	146.35	122.53	152.13	56.78	80.82	57.12	79.59
Nagaland	103.92	99.92	107.76	101.73	37.39	51.23	41.64	49.87
Orissa	81.87	87.08	96.24	100.57	29.60	38.65	40.32	50
Punjab	92.85	81.42	95.08	84.6	54.15	60.97	60.19	65.62
Rajasthan	50.62	58.46	80.31	85.1	16.24	23.4	38.96	46.24
Sikkim	115.83	126.84	127.72	132.74	50.83	71.74	55.90	73.18
Tamil Nadu	120.02	136.1	122.44	143.5	63.41	92.74	73.97	103.38
Tripura	112.73	119.92	124.17	126.73	49.95	60.57	57.99	65.87
Uttar Pradesh	50.33	59.53	69.29	75.69	23.09	31.29	40.61	46.62
West Bengal	70.17	97.71	78.86	104.15	32.48	45.17	41.01	53.05
A & N Islands	85.52	123.42	91.72	132.24	77.91	106.35	83.52	114.08
Chandigarh	79.44	94.46	80.55	96.24	75.67	99.67	73.60	98.16
D & N Haveli	107.45	97.36	123.18	113.15	36.16	43.07	43.79	57.14
Daman & Diu	149.30	90.85	157.19	90.89	85.12	82.45	97.40	87.78
Delhi	90.21	112.19	91.58	110.17	79.37	113.27	79.88	111.26
Lakshadweep	138.96	154.04	144.87	146.75	76.56	102.82	87.62	121.5
Pondicherry	115.95	114.11	118.94	117.62	72.17	111.64	79.73	110.2
All India	77.55	85.02	91.69	95.9	35.03	47.91	47.95	59.07

Source: NCERT, 1992 and 1995.

It has also been observed that a large number of States are in a position to achieve the goal of UPE. However, figures at the All-India level indicate that the goal may continue to remain elusive till all the remaining children are brought under the education fold. In this regard, Andhra Pradesh, Bihar, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal need immediate attention. A variety of activities have already been initiated in these States to promote primary education amongst which District Primary Education Programme (DPEP) is the most prominent one. The existing coverage of the DPEP, however, does not suggest that it will improve the situation to a significant effect. The majority of districts in a DPEP State are yet to be covered under the programme. Unless new programmes are launched or remaining States are added to the DPEP and programme is expanded to upper primary level, the goal of UEE may not be realised in the near future.

Table 22 : Out-of-School Children at All India Level, 1993-94
(Based on NCERT Data) (Figures in Million)

Age-group		Age-specific Population	Enrolment	Adjusted Enrolment (@15%)	Out-of-School Children	%	NER (%)	GER (%)
6-11 (I-V)								
	Boys	62.12	55.61	47.27	14.85	40.44	76.09	89.52
	Girls	57.68	42.13	35.81	21.87	59.56	62.08	73.04
	Total	**119.80**	**97.74**	**83.08**	**36.72**	**100.00**	**69.35**	**81.59**
11-14 (VI-VIII)								
	Boys	31.87	20.63	14.54	14.33	45.71	55.04	64.73
	Girls	28.43	13.42	11.41	17.02	54.29	40.13	47.20
	Total	**60.30**	**34.05**	**28.94**	**31.35**	**100.00**	**47.99**	**56.47**
6-14 (I-VIII)								
	Boys	93.99	76.24	64.81	29.18	42.87	68.95	81.11
	Girls	86.11	55.55	47.22	38.89	57.13	54.84	64.51
	Total	**180.10**	**131.79**	**112.03**	**68.07**	**100.00**	**62.20**	**73.18**

Notes : Totals may not tally due to rounding of figures.
: Enrolment has been adjusted at the flat rate of 15 per cent.
: Projected population is obtained from the MHRD (1997) publications.

Source: Computed by the author based on the NCERT (1995) and MHRD (1997) data.

It may be noted that primary enrolment is a function of 6-11 years age-group population but upper primary enrolment is not a function of 11-14 years population. Therefore, unless the goal of UPE is realised, UEE cannot be achieved, as upper primary education may be imparted to only those children who graduated primary cycle and continue to remain in the system. Till then, universalisation of primary graduates will be treated as achieving universal elementary enrolment (Varghese and Mehta, 1999a).

5.2 Out-of-School Children

While adjusting enrolment, the percentage of over-age and under-age children (@15 per cent), as mentioned above, is taken out from enrolment and refined enrolment is obtained. The balance of age-specific population and refined enrolment is termed as out-of-school children. About 14.85 million boys and 21.87 million girls of age-group 6-11 years were out-of-school compared to 14.33 million boys and 17.02 million girls of the age-group 11-14 years (Table 22). Combined together, more than 68 million children of age-group 6-14 years were out-of-school, of which girls constituted more than 57 per cent or 38.89 million in absolute terms. In other words, out-of-school children indicate a net enrolment of 69.35, 47.99 and 62.20 per cent respectively at the primary, middle and elementary levels of education which otherwise brought to hundred, the dream of universal enrolment would not be realised. The net enrolment ratio can be brought to hundred, if all children of the age group 6-14 years are enrolled and retained in the system. The actual number of out-of-school children may be little lower than the one computed in the present article, if the same is based upon the official MHRD data. The deviation between the MHRD and NCERT enrolment data at the elementary level is found to be about 16.7 million (Mehta, 1996). Based on the MHRD data, about 27.83, 26.38 and 54.21 million children of the age group 6-11, 11-14 and 6-14 years were out-of-school in 1993-94, also indicating a lot more efforts that would be required to bring all unenrolled children under the canopy of education system.

5.3 Additional Enrolment

The additional enrolment required to enroll by the year 2001 is presented in Table 23. The enrolment required is useful to know how many school places would be required in 2001 and in planning of incentive schemes, like mid-day meal may also be linked to future enrolment. The results reveal that at least 27.19 per cent additional enrolment in case of boys and 60.12 per cent in case of girls from the 1993-94 level would be required to achieve the goal of universal primary education by 2001. The corresponding estimate for age-group 6-14 years is 51.47 per cent for boys and 96.43 per cent for girls. In other words, about 40.45 and 52.34 million additional children respectively of the age-groups 6-11 and 11-14 years will be required to enroll by the year 2001 from the 1993-94 enrolment level. It may also be noted that the percentage of additional children that would be required at upper primary level is more than 100 (boys) and 200 (girls) per cent, which means there is need to further strengthen upper primary education. The high percentages at upper primary level can be achieved only through expansion and strengthening of primary system, without which children will neither get graduated nor transited to upper primary level.

Table 23: Projection of Additional Enrolment Required in 2001 to Achieve UEE from 1993-94 Level (Based on NCERT Data)

(Figures in Million)

Age-group	Age-specific Population - tion 2001	Adjusted Enrol-ment : 1993-94 (@15 %)	Additional Enrolment Required		Net Addition Children Required to Enroll	Percentage Increase from 1993-94 Level
			Within Age-group	Outside Age-group		
6-11 Years						
Boys	60.42	47.27	13.15	1.97	15.12	27.19
Girls	57.84	35.81	22.03	3.30	25.33	60.12
Total	**118.26**	**83.08**	**35.18**	**5.27**	**40.45**	**41.39**
11-14 Years						
Boys	38.50	17.54	20.96	3.14	24.10	116.82
Girls.	35.97	11.41	24.56	3.68	28.24	210.43
Total	**74.47**	**28.94**	**45.52**	**6.82**	**52.34**	**152.82**
6-14 Years						
Boys	98.92	64.81	34.11	5.11	39.22	51.44
Girls	93.81	47.22	46.59	6.98	53.57	96.43
Total	**192.73**	**112.03**	**80.70**	**12.09**	**92.79**	**70.41**

Notes: See previous Table.

Source: Same as in previous Table.

Both the estimates of out-of-school children and additional enrolment are presented only at the All-India level. However, an estimate at the All-India level is useful to a limited extent to know the quantum of unfinished task. But the same fails to identify States and within the States, districts and blocks, where out-of-school children concentrate mainly because of non-availability of requisite data at these levels. One of the crucial variables that are required for computing out-of-school children is age-grade matrix that is not readily available at disaggregated level. However, a few estimates that are available are confined mostly to the All-India level; hence cannot be applied to the State level data to obtain out-of-school children. Thus, 15 per cent flat rate applied to All-India data, if applied to State data may result into misleading estimates of out-of-school children. This is also evident from the gross enrolment ratio, which in a number of States is noticed to be very high, even higher than 115 per cent. Hence, due to these limitations, 15 per cent estimate of grossness is not applied to the State data. For that purpose State-specific estimates are best to use. However, if the full set of the NCERT data is available, the estimates of grossness can be generated even at the district level.

At the time of completion of this article, the NCERT estimates of overage & underage children were not available. However, the same is now disseminated and is

available at the State level. At the All-India level, the grossness estimated at the primary level is around 21 per cent. As a part of developing indicators for 'EFA-The year 2000 Assessment', both the out-of-school children and net additional enrolment that would be required in year 2001 is estimated. The revised estimates suggest that there were about 35.06 million out-of-school children in 1997-98 (against 36.72 million indicated above in 1993-94) which otherwise suggests that about 39.25 million children would have to be additionally enrolled by the year 2001, if the goal of UEE is to be achieved. The estimates further suggest that of the total 35.06 million out-of-school children (age-group 6-11 years), more than 17 million (48.94 per cent) come from the four most educationally backward States namely Madhya Pradesh (1.18 Million), Rajasthan (2.01million), Uttar Pradesh (11.72 Million) and Bihar (3.25 Million). The estimates of grossness used in these four States are 13.93 per cent in Madhya Pradesh, 26.14 per cent in Rajasthan and 24.97 per cent in Uttar Pradesh. Surprisingly, Bihar had unbelievable low percentage of overage and underage children (0.04 per cent) at the primary level, which if not correct will increase the out-of-school children dramatically (Thakur and Mehta, 1999).

6. UNIVERSAL RETENTION

Using the survey data between the period 1986-87 and 1993-94, dropout rate at the elementary level has been computed. At the All-India level, the dropout rate reveals that of the 100 children who had taken admission in Grade I in 1986-87, only 40 managed to reach Grade VIII in the year 1993-94. Similarly, about 58 and 63 per cent boys and girls dropped out from the system. The dropout rate otherwise indicates that the retention rate at the elementary level is about 42 per cent for boys and 37 per cent for girls. In absolute terms, about 8.3 million boys and 6.6 million girls dropped out from the system before the completion of an education cycle. However, grade-to-grade dropout rates, if computed, would indicate that majority of children drop out before reaching Grade III (Mehta, 1995). The grade-to-grade rates, however, cannot be computed as the NCERT survey data is not available for two consecutive years required for computation of dropout rate.

It may also be noted that the admission rate at the All-India level is as high as 116 per cent which indicates that a large number of children (both underage/ overage & of school age '6') are taking admission in grade I but a majority of them dropout from the system before completion of primary cycle. However, the net admission rate remained low at 68 per cent, which indicates that a large number of children of age '6' are still out-of-school (32 per cent). The recently published NSSO 52nd Round data for year 1995-96 also reveals that only 66 and 43 per cent children of age group 6-10 and 11-13 years were attending classes I-V and VI-VIII. The net admission rate (primary classes) was as low as 41 per cent in Bihar, 63 per cent in Madhya Pradesh, 61 per cent in Orissa, 55 per cent in Rajasthan, 59 per cent in Uttar Pradesh and 66 per cent in West Bengal. The percentage

Table 24: Dropout Rate at the Elementary Level (%): Cohort 1986-87

(Based on NCERT Data)

State/UT	Boys	Girls	Total
Andhra Pradesh	71	77	74
Arunachal Pradesh	70	71	70
Assam	70	70	70
Bihar	76	82	78
Goa	12	24	18
Gujarat	55	65	59
Haryana	23	36	29
Himachal Pradesh	26	33	29
J & K	33	42	37
Karnataka	58	67	62
Kerala	2	0	1
Madhya Pradesh	54	67	59
Maharashtra	49	57	53
Manipur	31	35	33
Meghalaya	83	84	84
Mizoram	72	69	71
Nagaland	67	67	67
Orissa	65	72	68
Punjab	39	42	40
Rajasthan	74	81	76
Sikkim	78	76	77
Tamil Nadu	31	42	36
Tripura	74	73	73
Uttar Pradesh	47	55	50
West Bengal	71	75	73
A & N Islands	25	29	27
Chandigarh	14	6	10
D & N Haveli	52	69	60
Daman & Diu	3	17	9
Delhi	2	2	2
Lakshadweep	38	53	45
Pondicherry	6	13	10
All India	58	63	60

Source: Computed by the author on the basis of information presented in NCERT, 1992 and 1995.
Note : Retention Rate = 100 – Dropout Rate.

of 11-13 years children attending upper primary classes in these States was lower than the children of 6-10 years attending I-V classes, all which reiterate that a large number of children of both 6-10 and 11-13 years are still out of school (NSSO, 1998).

At the State level, a mixed trend in dropout rate has been noticed (Table 24). It has been observed that the dropout rate is the lowest in Kerala, followed by Delhi, Daman & Diu, Chandigarh etc. Amongst the major States, the highest dropout rate is noticed in case of Bihar (78 per cent), followed by Rajasthan (76 per cent), Andhra Pradesh (74 per cent), West Bengal (73 per cent) and Orissa (68 per cent). Comparatively the dropout rate in Uttar Pradesh is low where as many as 50 per cent of those who had taken admission in Grade I in 1986-87 reached Grade VIII in 1993-94.

Further boys/girls differential in dropout rate at the elementary level has also been critically analysed. In Assam, Nagaland and Delhi, no difference is noticed in boys/girls dropout rate whereas in States, like Arunachal Pradesh, Kerala, Meghalaya, Punjab, Sikkim and Tripura, it is negligible. In rest of the States, the differential is significant and of high order. It has also been noticed that the States where the dropout rate is high, the corresponding boys/girls differential is also of the high order. Some of these States are Madhya Pradesh (13 per cent), Gujarat (10 per cent), Uttar Pradesh (8 per cent), Rajasthan (7 per cent) and Andhra Pradesh (6 per cent). Keeping in view the high dropout rate in Bihar, comparatively the boys/girls differential is low (6 per cent), as it is just one per cent above the All-India average i.e. 5 per cent.

Unless all children who enter into the system are retained and boys/girls differential is reduced to a significant effect, the goal of UEE, especially in the educationally backward States, is unlikely to be achieved in the near future. The Government in this direction has initiated programmes, like Operation Blackboard, ECCE and MLL project. In addition, a number of projects with the assistance of donor agencies have also been initiated. Andhra Pradesh Education Project, District Primary Education Programme (DPEP), Bihar Education Project and Uttar Pradesh Basic Shiksha Project (now under DPEP), Shiksha Karmi and Lok Jumbish projects are some of the prominent programmes that have been initiated in the recent past to promote primary education. In addition, a number of incentive schemes have also been initiated both by the State governments and as a part of the centrally sponsored schemes amongst which the mid-day meal scheme is the most recent. It is not only the incentives which help to retain child in the system but research findings reveal that infrastructural facilities available in a school and leadership provided by the school Head Master also play important roles in retaining a child in the system. However, the most important problem that remains is the proper utilisation of facilities and their adequacy and timely supply.

7. CONCLUDING REMARKS

Based on the analysis presented above on different components of UEE, one gets the impression that the country has progressed tremendously but still it has certain areas of concern which are primarily responsible for unfulfillment of the goal of UEE.

Across the States, educational facilities are now available to a large segment of population and areas but compared to primary schooling facilities, upper primary facilities are not yet available to all areas and population. Despite significant achievements, still a large number of habitations do not have primary and upper primary education facilities within a distance of one and three kilometres. The country also failed to adequately create, utilize and make available alternative education facilities in all the

unserved habitations and areas where out-of-school children concentrate. Over a period of time, the ratio of primary to upper primary schools declined but still the same is not as envisaged in the policy directives. This is more so when transition from primary to upper primary level improved significantly which means that more and more school places would be required in the years that follow. In addition, a large number of projects and programmes on primary education currently under implementation would also generate additional demand for upper primary education.

Keeping in view a large number of unserved habitations and villages and availability of only a few non-formal education centres, it may not be possible to bring all enrolled children either under the formal or non-formal system of education. The coverage of non-formal education, both in terms of habitations covered and number of learners does not indicate that the programme will be able to succeed in the near future. The areas where out-of-school children concentrate need to be first identified to make arrangements for alternate schooling. Hence, not only more formal and non-formal education facilities need to be created but the existing institutions will also have to be strengthened.

The number of teachers and pupil-teacher ratio over the time have improved significantly but still there are schools which do not have adequate number of teachers. This is also true in case of the NFE centres. The percentage of female teachers to total teachers has no doubt improved significantly but still their number is far from satisfactory. Teacher is the most important actor through which all interventions are expected to reflect in classroom transactions; hence training plays an important role. Studies have shown that internal management of school and leadership provided by the Head Master and his/her relationship with other teachers also plays a significant role in the efficient and effective functioning of a school.

The responsibility of training is entrusted to the District Institute of Educational Training (DIET) but still the majority of DIETs are not fully equipped to handle this mammoth task mainly because of the shortage of faculty and lack of expertise. In most of the cases, teachers training schools are promoted as DIETs, but still their activities center around teachers training and the faculty is not actively involved in planning and implementation of educational plans. With the creation of the proposed State Institute of Educational Management and Training (SIEMT), the training activities are expected to get momentum but only a few States have yet established SIEMT. The SIEMT in rest of the DPEP States is still at the planning stage; hence it would take more time to be fully operationalised. In the non-DPEP States, either the institutes similar to the SIEMT need to be created or the existing SCERTs will have to be strengthened adequately. Below the district level, Block Resource Centre, Cluster Resource Centre and Village Education Committees (VECs) are proposed under the DPEP but except VECs, such bodies are not yet envisaged to be created in the non-DPEP districts. In most of the States, VECs are created through a government order but are not fully entrusted powers and responsibilities as envisaged in the 73rd and 74th Constitutional Amendments on the *Panchayati Raj Institutions.*

The enrolment at the primary and upper primary levels of education over the time has improved significantly but still more girls are out-of-school than their counterpart boys. This is true for both primary as well as upper primary levels of education. The GER

at the primary level is quite high but the corresponding ratio for girls is still low. This is despite the fact that a large number of over-age and under-age children are included in enrolment. The enrolment ratio at the upper primary level is still lower than at the primary level, all of which do not indicate that the country is in a position to achieve the goal of UEE in the near future.

The efficiency of primary education system has direct impact on upper primary system. An inefficient primary system will transit a fewer children to upper primary cycle. The failure of primary system will compel to shift not only the target date of UPE but it will also shift the target date of UEE. Hence, unless the goal of UPE is achieved, the dream of UEE is not likely to be realised. Till then, imparting upper primary education to all primary graduates will be treated as achieving UEE. Unlike primary enrolment, which is a function of 6-11 years population, the upper primary enrolment is strictly a function of primary graduates.

The analysis also indicates that a large number of children enter into the system every year but majority of them drop out from the system before reaching Grade V. This severely affects the efficiency of the education system. If a child continues up to Grade III, his/her chances of completing the primary cycle are bright. But the available data shows that one out of every three children drop out from the system before reaching Grade III. Thus, unless the dropout rate is checked and all unenrolled children of the age-group 6-14 years are brought under the canopy of education, the dream of universal enrolment may not be realised. This is also supported by the findings of the recently undertaken projection exercises.

The unfinished task in terms of unenrolled and out-of-school children is a challenging one. Hence, rigorous efforts are needed to bring and retain them under the umbrella of education system. Disaggregated planning with block as its unit may help to identify the focus group and areas where out-of-school children concentrate. The community, in this direction, can play a vital role in bringing out the unenrolled children to schools. For this purpose, micro planning related exercises and development of village education plans may be very useful. This has already been initiated in the DPEP districts and the response is very much encouraging. Even, a large number of local people and functionaries are made involved in developing district plans which, if experimented in non-DPEP districts may bring a sea-change in the quality of planning exercises and their implementation. The funds allocated to the DPEP districts, however, remain unutilized and most of the activities are confined to the civil works. Despite this, preliminary trends in enrolment and retention are encouraging. However, till the funds are utilised as planned and more districts are added, the DPEP is also not expected to improve the situation to a significant effect. Neither the proposed *Serva Siksha Abhiyan* will improve the situation to a significant extent unless the effectiveness of the existing schemes is improved.

REFERENCES

1. Mehta, Arun C. (1995): **Education for All in India- Myth and Reality.** Kanishka, New Delhi.
2. Mehta, Arun C. (1996): **'Reliability of Educational Data in the Context of NCERT Survey'**. Journal of Educational Planning and Administration, NIEPA, July 1996, Volume X, No. 1, New Delhi.
3. Mehta, Arun C. (1997): **'Indicators of Educational Development: Concept and Definitions'.** NIEPA, New Delhi.
4. Mehta, Arun C. (1998): **Education for All in India - Enrolment Projections.** Vikash, New Delhi.
5. MHRD (1997 and 1999): **Selected Educational Statistics: 1996-97 and 1997-98.** New Delhi: Government of India.
6. NCERT (1992): **Fifth All India Educational Survey** (Volume I and II). NCERT, New Delhi.
7. NCERT (1995): **Sixth All India Educational Survey (Provisional Statistics).** November 1995, New Delhi.
8. NCERT (1998): **Sixth All India Educational Survey Statistics on Schooling Facilities.** NCERT, New Delhi.
9. NSSO (1998): **Attending an Educational Institutions in India : Its Level, Nature and Cost, 52nd Round: July 1995 – June 1996,** Department of Statistics, Government of India, New Delhi.
10. Thakur, R. S. and Arun C. Mehta (1999), **Education for All: The Year 2000 Assessment, Core EFA Indicators**, New Delhi.
11. Varghese, N. V. and Arun C. Mehta (1999a): **'Universalisation of Upper Primary Education in India - An Analysis of Present Status and Future.** National Institute of Educational Planning and Administration (NIEPA), New Delhi, February.
12. Varghese N. V. and Arun C. Mehta (1999b): **'Universalisation of Upper Primary Education in India - An Analysis of School Facilities and Their Cost Implications'.** National Institute of Educational Planning and Administration (NIEPA), New Delhi, February.