# Development of Education in the North-Eastern States A Study in National Perspective

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## Abstract

The development in education sector in the North Eastern (NE) states of India in the last 67 years since independence needs to be reviewed. Government of India has been providing financial support to North Eastern States through various schemes. However, in spite of that, the pace of development under different sub sectors of education has been uneven. Four NE States namely Tripura, Meghalaya, Arunachal Pradesh and Sikkim have made significant (>25%) improvement in raising the literacy rate. An analysis of Pupil - Teacher Ratio (PTR) in different NE states over the given 20 years period reveals that while the PTR has changed adversely in case of Manipur and Meghalaya, it has improved significantly in Assam, Mizoram and Tripura. Teachers' training scenario at primary stage is very pathetic in Nagaland, Manipur, Arunachal Pradesh and Mizoram. In only three of eight NE States (i.e., Assam, Sikkim and Tripura) more than 50 % primary school teachers are trained. The scenario in case of Middle/Senior Basic Schools is more or less the same as that of the primary stage. Keeping in view the trend of achievements in terms of GER for girls at upper primary level, the States of Nagaland, Tripura and Sikkim would have to make concerted efforts for success of Sarva Shiksha Abhiyan(SSA), particularly through the focus on upper primary level. An encouraging trend is observed in the expansion of colleges in the North Eastern States. However, the States of Mizoram and Nagaland were still not having a single engineering college till 2008-09. Over two decades' period, the number of medical colleges in the NE region grew up to 18. However, the State of Mizoram and Nagaland still remained deprived in term of medical education also. In order to reduce the regional disparity and for mainstreaming of the entire North Eastern region, emphasis should be laid on strengthening the institutions as well as quality of education at every stage of education i.e., from Primary to University level.

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### Introduction

In last 67 Years of independent India, there has been tremendous progress in the field of education. Beginning with the emphasis on universalisation of elementary education. the Government has stretched its efforts to development of higher and technical education in the country. To ensure a balanced pace of development across the country, the Government of India has been providing financial support to North-Eastern States for various schemes. It may be noted that with a view to provide balanced development, Government of India decided to earmark 10% of the entire Central Government plan fund for the North Eastern States. Setting up of the Department of North Eastern Region (DONER) by Government was an effective step in this direction which mainly aimed at expediting the pace of development in the entire North Eastern region of the country.

From the available data, it is observed that except Arunachal Pradesh and Assam, the other North Eastern States are educationally advanced States of the country as far as the literacy scenario in India is concerned. It is noted that all the North Eastern States have made very good progress in increasing the literacy rate in the period between 2001 and 2011.

It is interesting to observe that the NER is a highly literate region. Except for Arunachal Pradesh (66.95) and Assam (73.18), all the other States have literacy rates of about or above national average of (74.04%) as per 2011 Census, which provides a good pool of educated human resources in the region. It is however observed that in spite of the Central Government's efforts to provide proportionate funding to all the NE states, the pace of development under different sub sectors of education has been uneven. Disparity in educational development among the NE States may have been because of their fiscal constraints or geophysical compulsions. Moreover, inter-state variations in respect of educational developments among NE States may be due to priorities accorded by the respective State Governments to the specific sub sectors of education and allocations accordingly. As it is known, the standard norms adopted by Government of India for funding all the Centrally Sponsored Schemes for all the NE States is in the proportion of 90:10.

Analysis of development various sub sectors of education among different NE States brings forth interesting observations. By analysing the progress made in different sub sectors of education in NE States over the last two/three decades, we can develop a comparative framework to help us in assessing the outcome of measures taken by respective State Governments and also the impact of central assistance through various centrally sponsored schemes for which 90% of the fund is provided by Central Government. For systematic development, any State

Table 1
States wise literacy rate over 1991 to 2011

L	Literacy Rate: (as per Census)									
India/NE States	1991	2011	% increase over two decades							
India	52.2	74.04	21.84							
Assam	52.9	73.18	20.28							
Arunachal Pradesh	41.6	66.95	25.35							
Manipur	59.9	79.85	19.95							
Meghalaya	49.1	75.48	26.38							
Mizoram	82.3	91.58	9.28							
Nagaland	61.6	80.11	18.51							
Sikkim	56.9	82.20	25.30							
Tripura	60.4	87.75	27.35							

Source: Population Census, 1991, 2011, Office of Registrar General of India and Census Commissioner.

requires its people to be educated. Literacy is the first step towards educational development. To begin with, we could make a comparative study of improvement in literacy rate in these states between two decades i.e.; 1991-2011.

From the above table, it is observed that the four NE States(namely Tripura, Meghalaya, Arunachal Pradesh and Sikkim) have made significant (>25%) improvement in raising the literacy rate in the period over two decades i.e., 1991-2011. However, it is observed that the

literacy rate in two States namely, Assam (73.18) and Arunachal Pradesh (66.95) is still below the national average (74.04). Hence these two States need to make additional efforts in this direction.

To ensure that the entire gamut of population in the concerned age group has access to education; the State is required to create basic infrastructure facilities. Pupil-Teacher Ratio is one of the key indicators of educational progress. The available data in this regards is given in the following tables:

# Pupil-Teacher Ratio (PTR)

Table 2(a)
Pupil-Teacher Ratioat Primary/Junior Basic School Stage

India/NE States	1987-88	2008-09	%Change over Two Decades
India	42	44	2
Assam	48	36	-12
Arunachal Pradesh	29	22	-7
Manipur	19	33	14
Meghalaya	32	40	8
Mizoram	26	17	-9
Nagaland	24	25	1
Sikkim	14	14	0
Tripura	30	27	-3

Sources: (i) Selected Education Statistics, Department of Education, MHRD, GOI, 1987-88. (ii) Statistics of School Education (Abstract) 2008-2009, Bureau of Planning, Monitoring and Statistics, MHRD, GOI, 2010.

Table 2(b)
Pupil-Teacher Ratio at Middle/Senior Basic School Stage

India/NE States	1987-88	2008- 09	%Change over Two Decades
India	33	34	1
Assam	31	17	-14
Arunachal Pradesh	24	25	1
Manipur	17	22	5
Meghalaya	17	12	-5
Mizoram	11	8	-3
Nagaland	22	17	-5
Sikkim	15	14	-1
Tripura	25	18	-7

An appropriate Pupil-Teacher Ratio facilitates a conducive teachinglearning environment. From the point of view of perception of students, a classroom with 30-35 students may be treated as appropriate. Keeping this in view, it is observed from the above table 2(a) that at the All India level, necessary steps are required for having a proportionate Pupil - Teacher Ratio (PTR). However, an analysis of PTR in different NE states over the given 20 years' period indicates that while the PTR has changed adversely in case of Manipur and Meghalaya, it has improved significantly in Assam, Mizoram and Tripura. In fact, the States of Meghalaya, Assam and Manipur would need to take concrete steps for appointing requisite number of teachers for introducing appropriate PTR. Further, it is important to note that the foundation of good education is laid at primary stage. Hence, having appropriate PTR at this stage is all the more necessary.

In case of this segment (i.e. Middle/ Senior Basic School Stage) by and large there has been improvement in PTR except for the States of Arunachal Pradesh and Manipur, where it has increased by 1 and 5 respectively.

In case of PTR at High school stage, while the achievement in case of Sikkim and Assam reflect better performance, the State of Arunachal Pradesh has maintained status-quo. However, it has changed adversely in case of Nagaland, Manipur, Meghalaya and Mizoram. In case of these States adequate steps need to be taken to provide quality education keeping in view the fact that a sizable number of young people enter the work force after completing education upto this stage only.

Table 2 (c)
Pupil-Teacher Ratio at High/Post Basic School Stage

India/NE States	1987-88	2008-09	%Change over Two Decades
India	29	32	3
Assam	28	20	-8
Arunachal Pradesh	23	23	0
Manipur	21	27	6
Meghalaya	24	28	4
Mizoram	10	11	1
Nagaland	21	30	9
Sikkim	18	8	-10
Tripura	23	25	2

### TEACHER'S TRAINING

The outcome of education depends mainly on the content and quality of teaching. To ensure good quality teaching, it is necessary that every teacher at every stage of education is appropriately trained. The proportion of trained teachers in NE States in the two reference years i.e., 1987-88 and 2008-09 in the following tables presents a comparative view.

Through the review of the teachers' training scenario at primary stage, it is observed that the situation is very pathetic in Nagaland, Manipur, Arunachal Pradesh and Mizoram. In only three of the eight NE States (i.e. Assam, Sikkim and Tripura), more than 50% primary school teachers are trained. However, even these States are far behind the national average (i.e.,90%).

The Scenario at Middle/Senior Basic School Stage is more or less the same as that of the primary stage. At this stage also, the percentage of trained teachers in case of Nagaland, Arunachal Pradesh, Manipur, Meghalaya, Sikkim and Tripura was below 50% in 2008-09. Only the State of Assam(having 90% of trained teacher) was closer to national average.

It is observed that at High/Post Basic School Stage, only the States of Tripura and Sikkim had more than 50% of trained teachers in 2008-09. At this stage also, the percentage of trained teachers is abysmally low in case of Nagaland (25%), Assam (29%), Meghalaya(36%), Arunachal Pradesh (37%) and Manipur (42%).

Thus, a comparative view of the trained teachers at different stages

Table 3(a)
Percentage of Trained Teachers at Primary/Junior Basic School Stage

India/NE States	1987-88	2008-09	%Change over Two Decades
India	88.41	90.00	1.59
Assam	61.00	64.00	3.00
Arunachal Pradesh	41.03	11.00	-30.03
Manipur	67.00	36.00	-31.00
Meghalaya	42.00	45.00	3.00
Mizoram	50.85	39.00	-11.85
Nagaland	88.00	24.00	-64.00
Sikkim	48.46	68.00	19.54
Tripura	38.56	74.00	35.44

Table 3(b)

Percentage of Trained Teachers at Middle/Senior Basic School Stage

India/NE States	1987-88	2008-09	%Change over Two Decades
India	90.10	91.00	0.90
Assam	25.00	90.00	65.00
Arunachal Pradesh	38.66	17.00	-21.66
Manipur	51.00	35.00	-16.00
Meghalaya	33.00	36.00	3.00
Mizoram	53.87	50.00	-3.87
Nagaland	51.30	19.00	-32.30
Sikkim	36.80	42.00	5.20
Tripura	40.78	47.00	6.22

Sources: (i) Selected Education Statistics, Department of Education, MHRD, GOI, 1987-88. (ii) Statistics of School Education (Abstract) 2008-2009, Bureau of Planning, Monitoring and Statistics, MHRD, GOI, 2010.

Table 3 (c)
Percentage of Trained Teachers at High/Post Basic School Stage

India/NE States	1987-88	2008-09	%Change over Two Decades
India	86.49	89.00	2.51
Assam	23.00	29.00	6.00
Arunachal Pradesh	39.76	37.00	-2.76
Manipur	33.00	42.00	9.00
Meghalaya	31.00	36.00	5.00
Mizoram	45.63	40.00	-5.63
Nagaland	63.00	25.00	-38.00
Sikkim	41.35	55.00	13.65
Tripura	46.92	63.00	16.08

of school education in the North Eastern States presents a gloomy picture. For mainstreaming the entire North Eastern India, it is necessary that we train all the teachers at high school level also which will help the youth across these States in availing best possible opportunities in the job market. However, it would be inappropriate or illogical to expect good quality education without having trained teachers. Hence, teachers' training at High/Post Basic School should be accorded top priority in the entire NE region.

## GROSS ENROLMENT RATIO (GER)

GER is one of the basic parameters to assess the success of universalisation

of elementary education, which Government is trying to ensure through Sarva Siksha Abhiyan(SSA). The GER at the Primary and Upper-Primary stage in NE States in comparison with the all India GER is given in the following tables:

The main inferences drawn from the two above mentioned tables are as follows:

## (a) Changes in GER at Primary Stage (Class I-V) 2007-08 over 1987-88 (i.e two decades)

It is observed that the highest achievement, i.e 90.89 in terms of GER, has been in case of Meghalaya, whereas the lowest i.e., -25.77 has been in case of Nagaland.

Table 4(a)
Gross Enrolment Ratio (GER): Class I-V(6-10 years)

India/NE		1987-88			2007-08			
States	Boys	Girls	Total	Boys	Girls	Total	over Two Decades in case of Total	
India	113.13	81.75	97.86	115.26	112.58	113.97	16.11	
Assam	112.22	98.78	105.71	106.04	106.15	106.09	0.38	
Arunachal Pradesh	110.06	75.54	92.91	149.05	136.62	142.97	50.06	
Manipur	125.53	104.79	115.29	175.95	170.30	173.18	57.89	
Meghalaya	102.29	99.01	100.64	193.47	189.54	191.53	90.89	
Mizoram	139.59	134.17	136.94	176.07	165.66	170.95	34.01	
Nagaland	118.82	117.73	118.28	92.50	92.52	92.51	-25.77	
Sikkim	127.99	105.42	116.81	149.31	146.71	148.02	31.21	
Tripura	142.81	118.09	130.66	149.37	146.15	147.79	17.13	

Sources: (i) Selected Socio-Economic Indicators of North-East States of India, Directorate of Economics and Statistics, Govt. of Assam, 2007-08. (ii) Selected Education Statistics, Department of Education, MHRD, GOI, 1987-88.

India/NE	1987-88				%Change		
States	Boys	Girls	Total	Boys	Girls	Total	over Two Decades in case of Total
India	68.87	40.62	55.14	81.48	74.36	78.06	22.92
Assam	60.19	44.76	52.75	92.04	90.47	91.27	38.52
Arunachal Pradesh	47.87	26.55	37.47	100.88	87.69	94.36	56.89
Manipur	82.69	60.93	71.96	107.57	100.92	104.31	32.35
Meghalaya	61.95	53.46	57.66	99.71	107.00	103.32	45.66
Mizoram	71.13	70.24	70.69	86.30	84.97	85.65	14.96
Nagaland	60.72	52.44	56.68	58.93	61.34	60.08	03.40
Sikkim	59.06	49.35	54.37	67.63	81.91	74.62	20.25
Tripura	76.51	57.95	67.40	88.01	87.60	87.81	20.41

Table 4(b)
Gross Enrolment Ratio (GER): Class VI-VIII (11-13 years)

Sources: (i) Selected Socio-Economic Indicators of North-East States of India, Directorate of Economics and Statistics, Govt. of Assam, 2007-08. (ii) Selected Education Statistics, Department of Education, MHRD, GOI, 1987-88.

- (i) It is also observed that change in the GER in the two States namely Nagaland and Assam have been below the all India average. On the contrary, the GER in all other NE States is above the all India average.
- (ii) It has been widely perceived that Sarva Siksha Abhiyan(SSA) can be made successful only if the enrolment of girl children is brought at par with those of the boys. From table 4(a), it is observed that while there has been significant improvement in all India average of GER of girls as compared to GER of boys, it has gone up by 30.83 for girls in comparison to 2.13 for boys.
- (iii) Incidentally, in terms of achievement for girls in GER, the states of Nagaland and Assam are lagging behind. However, the highest achievement has been observed in case of Meghalaya (90.53) followed by Manipur (65.51).
- (iv) In case of GER for boys also, the achievement has been lowest in case of Nagaland (-25.77) and Assam (0.38).

## (b) Changes in GER at Upper-Primary Stage (Class VI-VIII) 2007-08 over 1987-88 (i.e two decades)

(i) It is observed that the achievement in terms of GER at all India level increased by 22.92; while the four States namely Arunachal NEPradesh. Meghalava, Assam and Manipur have the GER rate above the all India average. On the contrary, remaining four NE States namely Nagaland, Mizoram, Sikkim and Tripura had the GER rate below all India average. This implies that additional efforts are needed to be made in the said four States having GER rate below the all India average. Those four States need to take necessary steps to enhance the enrolment of students and also strong then the ways and means to ensure their retention.

(ii) It is observed that Arunachal Pradesh has the highest achievement (56.89) followed

- by Meghalaya (45.66). On the contrary, the States having lowest achievement in terms of GER are Nagaland (3.4) followed by Mizoram (14.96).
- (iii) In case of GER for girls at upperprimary level, it is observed that the achievement at all India level has been 33.74 which are interestingly higher than those for boys (12.61).
- (iv) In case of NE States the trend of achievement in terms of GER for girls at upper-primary level is same as that of total GER. Here also, the States namely Nagaland, Mizoram, Tripura and Sikkim had the GER rate below all India average. Thus, it leads to inference that before

Table 5(a)
Dropout Rate: Class I-V

India/NE States		1987-88	3	2	2008-09	%Change over Two	
	Boys	Girls	Total	Boys	Girls	Total	Decades in case of Total
India	43.28	49.42	46.97	26.68	22.90	24.93	-22.04
Assam	51.59	59.47	55.01	NA	NA	NA	NA
Arunachal Pradesh	58.75	58.43	58.63	41.80	39.71	40.84	-17.79
Manipur	71.35	72.04	71.67	39.55	41.19	42.31	-29.36
Meghalaya	31.43	33.40	32.35	60.77	56.95	58.87	26.52
Mizoram	37.28	38.72	37.98	39.98	40.08	40.03	2.05
Nagaland	37.22	33.43	35.45	21.40	15.71	18.70	-16.75
Sikkim	60.19	58.50	59.86	41.97	31.55	36.95	-22.91
Tripura	59.14	58.02	58.63	24.64	20.07	22.49	-36.14

taking up the issue of promoting education at secondary school stage these states of NE region would be required to make concerted efforts for making SSA successful, particularly through the focus on upper-primary level.

#### DROPOUT RATE

Dropout rate is one of the indicators reflecting the effectiveness of any programme of education. A comparative view of dropout rate at different stages of education in 1987-88 vis-a –vis 2007-08 is as follows:

(i) From the above table 5(a), it is observed that in term of all India average in the above mentioned two decades period, there has

- been considerable decline in the drop-out rate (i.e.22.04) at lower primary stage (class I-V).
- (ii) In case of Mizoram, the dropout rate has increased by 2.05% and surprisingly, there has been a steep rise (26.52%) in case of Meghalaya. This needs to be examined meticulously and calls for effective remedial measures for ensuring the success of SSA in these two States.
- (iii) ItisobservedthatatPrimaryStage, in terms of all India average, there has been considerable decline in the drop-out rate (26.52%) in case of girls. However, the decline in Meghalaya (+23.55), Mizoram(+1.36), Nagaland(17.72)

Table 5(b)
Dropout Rate: Class I-VIII

India/NE States	1987-88				2008-09	%Change over Two	
	Boys	Girls	Total	Boys	Girls	Total	Decades in case of Total
India	58.80	67.55	62.29	44.89	38.86	42.25	-20.04
Assam	70.91	74.45	72.44	68.21	68.35	68.28	-4.16
Arunachal Pradesh	75.20	75.91	75.44	44.87	43.31	44.16	-31.28
Manipur	76.58	87.86	77.90	42.92	44.94	43.90	-34
Meghalaya	66.42	61.60	64.22	79.61	75.75	77.69	13.47
Mizoram	45.35	42.49	43.98	64.18	61.61	62.97	18.99
Nagaland	58.15	55.13	56.90	31.81	31.03	31.43	-25.47
Sikkim	63.83	60.11	62.51	52.99	39.41	46.41	-16.1
Tripura	73.95	75.96	74.83	49.49	45.53	47.61	-27.22

- and Arunachal Pradesh(18.72) is below the all India level and hence requires necessary steps to be taken for bringing it at par with the National average.
- (i) From the above table, it is observed that in term of all India average in the above mentioned two decades' period there has been considerable decline in the drop-out rate (i.e.20.04) at elementary stage (class I-VIII).
- (ii) In case of Mizoram and Meghalaya the drop-out rate has increased by 18.99% and 13.47% respectively. In case of these two States, effective corrective measures are required to ensure that children reach at least up to the secondary

- stage of education before they join workforce of the country.
- (iii) The decline in dropout rate at elementary stage (class I-VIII) in case of Sikkim (16.10) is below all India average (20.04). However, the same in case of Assam is only 4.16%. It implies that the Government of Assam needs to lay focus on reducing the dropout rate and bring it at least at par with all India average.

It is observed that the dropout rate for class I-X over the said two decades in terms of all India average has declined by 19.42 %. Interestingly, in the entire NE States it is only Arunachal Pradesh where the decline in dropout rate for this stage has been 29.97%.

Table 5(c)
Dropout Rate: Class I-X

India/NE States	1987-88				2008-09	% Change over Two	
	Boys	Girls	Total	Boys	Girls	Total	Decades in case of Total
India	72.14	80.06	75.30	55.82	55.95	55.88	-19.42
Assam	78.07	81.88	79.73	78.47	79.55	78.97	-0.76
Arunachal Pradesh	83.03	85.75	83.92	63.39	62.43	62.95	-20.97
Manipur	75.69	77.68	76.61	58.91	57.06	58.03	-18.58
Meghalaya	89.46	89.62	89.53	77.03	75.77	76.40	-13.13
Mizoram	75.95	79.04	77.45	70.16	66.45	68.41	-9.04
Nagaland	81.71	82.90	82.21	68.34	66.84	67.61	-14.6
Sikkim	87.89	91.39	89.37	81.99	82.53	82.26	-7.11
Tripura	77.33	77.55	77.42	71.68	70.33	71.04	-6.38

However, the decline in dropout rate at this stage in other NE States is below the all India average. The example of Assam, Tripura, Sikkim and Mizoram may be cited as special cases which have less than half of the achievement at all India average. This implies that the larger number of NE States; particularly, the above mentioned four States need to go into the depth of reasons underlying such a lag. The Government of India may consider helping these NE States for taking up necessary corrective measures as per their specific situation.

#### DEVELOPMENT OF INFRASTRUCTURE

A review of institutional development at elementary stage in case of NE States leads to inference that there has been 45.20 % growth in the primary/ junior basic schools at the all India level. In case of NE States; Mizoram, Arunachal Pradesh, Meghalaya and Sikkim have shown the growth rate higher than that of all India average. However, the growth in case of Nagaland, Assam and Tripura has been far below the all India average while in case of Manipur it has been negative. It needs to be examined whether such a wide variation in terms of growth of primary/junior basic schools among the NE States is related to the population of children in the school going age or it is because of the other constraints faced by concerned States.

Table 6 (a)

Development of Infrastructure at Elementary Stage:

India/NE States	Prima	ary/Junio Schools		Middle/Senior Basic Schools			
	1987-88	2008- 09	%Change over Two Decades	1987- 88	2008- 09	%Change over Two Decades	
India	543677	789444	45.20	141014	336638	138.73	
Assam	26670	31042	16.39	5181	13023	151.36	
Arunachal Pradesh	1036	1721	66.12	219	813	271.23	
Manipur	2777	2579	-7.13	436	792	81.65	
Meghalaya	4158	6618	59.16	670	2259	237.16	
Mizoram	1033	1783	72.60	477	1253	162.68	
Nagaland	1270	1662	30.87	343	465	35.57	
Sikkim	489	769	57.26	123	215	74.80	
Tripura	1927	2120	10.02	418	1059	153.35	

Sources: (i) Selected Education Statistics, Department of Education, MHRD, GOI, 1987-88. (ii) Statistics of School Education, MHRD, GOI, 2010.

In case of middle/senior basic schools, the growth rate at all India level was 138.73 %. While Arunachal Pradesh, Meghalaya, Mizoram and Assam had the growth rate higher than the all India level in this segment of elementary education; the performance of Manipur, Sikkim and Nagaland was below the national average. Since this level of education is main link between primary and tertiary sector, it is necessary to strengthen this segment in the three said States.

In an analytical report on elementary education in India conducted by Ministry of HRD in the document "Educational Development Index", it has been observed that among the North Eastern States, Sikkim outperformed the States in the region at primary and composite primary and upper primary (Elementary) levels of education. Sikkim is placed 13th amongst all the 35 States and UTs of the country in case of composite, primary and upper primary level of education.

In case of infrastructure set of indicators at primary level, it was observed that Sikkim had highest EDI (0.764) and 0.833 at upper primary level. Sikkim was followed by Mizoram with an EDI of 0.653. The lowest EDI (0.350) in this region was observed in Meghalaya. Meghalaya was also found to have lowest infrastructure index (0.490). It was also observed that Arunachal Pradesh having EDI (0.432) at primary level ranked 33 out of 35 States included in the analysis.

The said analysis of Ministry of HRD also informed that like infrastructure, most of the States in the North Eastern Region were better placed at upper primary level with regard to teachers' indicators compared to primary level<sup>1</sup>.

# Access to Secondary School Education

Regarding schooling facilities secondary stage provided by the Government, the available data indicate that Tripura is the best, than 90% where more schools are Government Schools while Meghalaya is the worst wherein about 95% secondary schools are private schools. It is interesting to note that in Arunachal Pradesh and Sikkim also 80% of secondary schools are Government schools. The NUEPA Occasional Paper also observed that within the North Eastern Region, Mizoram has the best access to secondary schooling facility while Arunachal Pradesh has lowest access to the same and hence the need for opening more secondary schools in Arunachal has been suggested to fill the gap with respect to the demand for secondary education<sup>2</sup>.

### FEMALE TEACHERS

Regarding the availability of female teachers, it has been observed that at secondary level, the North Eastern Region had about 30.74% female teachers which were quite less than the percentage of female teachers in the country (i.e. 40.69%). Only

two of the States in the NE region i.e. Meghalaya (43.40%) and Sikkim (41.41%) had higher percentage of female teachers than the national average<sup>3</sup>.

As regards the trained teachers at secondary stage, it is observed that as against 82% of trained teachers at the secondary level in the country, the NE region had only 27.19% trained teachers. This speaks of the challenge faced by the States of the NE region in terms of the quality of education imparted at secondary level.

enable our Schools smoothly, it is necessary to have requisite number of teachers. As per the available information, though 6 North Eastern States were accorded sanction for recruitment of new teachers under Rashtriya Madhyamik Shiksha Abhiyan (RMSA), only three states had recruited some teachers by 2012. While Manipur recruited 503 teachers out of 830 (ie about 606%) of the sanctioned number), Tripura recruited 210 teachers out of 415 (i.e., about 50.6% of the sanctioned teachers) and Mizoram could appoint only 180 out of 532 (ie, About 34.6% of the sanctioned number) up till June, 20124.

To ensure proper development of education and IT based learning 1775 secondary schools in the North Eastern region were sanctioned computer rooms under RMSA in the 11th Five Year Plan (2007-2012). About half of these schools were in Assam (860) followed by Mizoram (199) and Tripura (186). Similarly, the

states of Arunachal Pradesh, Manipur Nagaland were sanctioned and 176,165 and 126 computer rooms respectively. However, while Sikkim was sanctioned 52 computer rooms, Meghalaya was sanctioned 13computer rooms in the said period. In addition to that, it is also observed that in the 11th Five year plan (2007-2012), states were provided financial assistance to procure computers and other ICT related infrastructure. In the 11th Five Year plan (2007-12) a total of Rs 59.79 crore was released to NE states covering 3094 schools under ICT @School scheme. The maximum advantage under this was availed by the states of Assam (1881 schools) and Tripura (682 schools) followed by Meghalaya (316 schools)<sup>5</sup>.

Due support was also provided to 1,731 secondary schools of NE states for setting up libraries. While Assam was sanctioned 838 libraries, Tripura and Mizoram were sanctioned 211 and 195 libraries respectively. The remaining three NE states sanctioned less than 100 libraries each were Manipur (95), Sikkim (98) and Meghalaya (14)<sup>6</sup>.

The growth of institutions at secondary stage at all India level has been 124.75 %. Interestingly, the states of Arunachal Pradesh, Mizoram, Nagaland and Meghalaya have made better achievements than the national average. On the contrary, the performance of Assam, Sikkim, Manipur and Tripura has been below the national average.

As regards the institutions at

Table 6 (b)

Development of Infrastructure at Secondary Stage
tes High/Post Basic Schools Pre-degree/ June

India/NE States	High/	Post Basi	c Schools	Pre-degree/ Junior Colleges/ Hr. Secondary Schools			
	1987- 2008- 88 09		%Change over Two Decades	1987- 88	2008- 09	%Change over Two Decades	
India	54845	123265	124.75	16460	60383	266.85	
Assam	2380	5215	119.12	371	755	384	
Arunachal Pradesh	55	171	210.91	38	109	186.84	
Manipur	349	704	101.72	35	120	242.86	
Meghalaya	292	676	131.51	-	98	-	
Mizoram	162	502	209.88	-	86	-	
Nagaland	111	337	203.60	4	69	1625	
Sikkim	54	118	118.52	14	55	293	
Tripura	255	430	68.63	126	301	138.89	

Sources: (i) Selected Education Statistics, Department of Education, 1987-88 MHRD, GOI, 1989. (ii) Statistics' of School Education, MHRD, GOI, 2010.

Pre-degree/Junior Colleges/Hr. Secondary Schools, it is observed that expansion has been notable in case of Nagaland. Since the data is not available regarding the number of institutions for education at this level in 1987-88 in Meghalaya and Mizoram, the progress over two decades may not be reviewed. However, from the preliminary observation, it is noted that the expansion at this stage in the North Eastern States has been by and large higher than the all India average.

In terms of infrastructure the situation in NE States is pathetic particularly regarding lavatory facilities and urinals for girls. As sighted in the occasional papers of NEUPA, the lavatory facility is

available in more than 60 per cent secondary schools of the country but this facility is provided only in about 38 per cent schools in the northeastern region. In Sikkim, more than 70 per cent secondary schools have lavatory. However, in Assam this facility is available only in 24 per cent secondary schools and that is the lowest in the north-eastern region.

Urinals for girls are available in about 68 per cent secondary schools in the country but in the north-eastern region this facility is available in about 52 per cent schools only. In the North-Eastern states, Nagaland has the highest percentage of secondary schools having girls' urinals while Mizoram has the lowest percentage of such schools. Girls'

lavatories are available in about half of the secondary schools of the country while in the north-eastern region; this facility is available in only about 20 per cent schools. In the north-eastern region, not even a single state has this facility at par with the national average (49.37 per cent)<sup>7</sup>.

To deal with the problem of accommodation faced by Teachers, Residential quarters were sanctioned for secondary school teachers in 5 out of 8 NE states. Manipur was sanctioned the highest number of quarters (304) followed by Arunachal Pradesh (203)Nagaland (199),Mizoram (141) and Tripura (30). It is observed that no residential quarters were sanctioned for teachers under RMSA in the states of Assam, Meghalaya and Sikkim. How is the problem of out of station secondary school teachers being addressed in these states needs to be analysed8.

In the NUEPA Occasional papers, it has been indicated that in terms of availability of building in secondary schools, Tripura is the best performing State where about 87% secondary schools have pucca building, while Nagaland is the worst performing State in the NE region as there are about 94% secondary schools run in kuchha building and a little more than 3% do not have any building at all.

Regarding the facilities of rooms available for various purposes like library, laboratory, boys and girls' common room and indoor games room etc., NUEPA study suggest that secondary schools of Manipur have best facilities followed by Nagaland. The States having least facility on this account in the NE region are Mizoram and Assam.

As regards the availability of electricity connection, generator sets, computers and internet connection etc., study indicate that secondary schools of the NE region are in relatively poor condition as compared to other regions of the country. Only about 50% of the schools have electricity connection compared with 73% schools in other parts of the country. While 26% secondary schools have computers in the country, only 13% of schools in NE region have got computers.

In terms of school library, librarian, the living room also the schools in the NE region are found to relatively less equip than the schools of other regions. It is noted that about 43% of the secondary schools in the NE region have library in comparison with 2/3rd secondary schools of other parts of the country having this facility. Only 3.35% schools of the NE region have librarian while 12% schools in other regions have the same. Similarly, only 7.3% schools of the NE region have a living room as compared with 23% secondary schools in other regions of the country.

# DEVELOPMENT OF INFRASTRUCTURE AT THE HIGHER EDUCATION STAGE

Expansion, inclusion and quality are the three corner stones of our national goals in education. At the higher education level the Government has set a target of 21% GER by the end of the 12th Plan (2017). Keeping in view the present GER which is 12.4% the target of 21% appears to be really challenging. In a study conducted under the aegis of Indian Chamber of Commerce through Price Waterhouse Coopers, it has been observed that Nagaland has the highest GER in the country with Manipur at 7th position while the rest of eastern and north eastern States are much lower down. and in most cases, below the national average<sup>9</sup>. There are two examples of successful expansion of higher education in the NE region. The first is that of Sikkim Manipal University and the second one between the Govt.

of Mizoram and New Horizons India (a US – based company) to set up and IT Entrepreneurs Training Centre And Promatric Testing Centre at Aizawal in 2005. The main challenge faced in the region is that of inaccessibility, poor physical infrastructure, law and order problems and limited local employment opportunities.

It is observed that in 1987-88, out of total 166 universities (including Central/State/Pvt./Institutions Deemed to be universities) in the country; only 7 universities were in the NE Region. The States of Mizoram, Nagaland and Sikkim did not have a single university at that time. The positive aspect of the development at the higher education stage in NE States is that all of them had at least

Table 6 (c)
Growth of Universities in NE region

India/NE	Universities (Central/State/Pvt./Deemed)							
States								
	1987-88	2008-09	%Change over Two Decades					
India	166	371	123.5					
Assam	3	6	100.0					
Arunachal Pradesh	1	2	100.0					
Manipur	1	2	100.0					
Meghalaya	1	1	0.0					
Mizoram	-	1	100.0					
Nagaland	-	1	100.0					
Sikkim	-	3	300.0					
Tripura	1	2	100.0					

Sources: (i) Selected Education Statistics, Department of Education 1987-88, MHRD, GOI, 1989. (ii) Statistics of Higher and Technical Education 2008-09, MHRD, GOI, 2011.

Table 6 (d)
Growth of Colleges in NE region (Institutions and Enrolment)

India/NE States	Colleges (Arts/Science/ Commerce)			Enrolment (Arts/Science/ Commerce)			
	1987-88	2008- 09	%Change over Two Decades	1987-88	2008-09	%Change over Two Decades	
India	4329	14147	226.8	1412468	8807870	523.58	
Assam	160	337	110.6	64161	193812	202.07	
Arunachal Pradesh	3	13	333.3	1080	10600	881.48	
Manipur	23	58	152.2	10230	23750	132.16	
Meghalaya	23	57	147.8	5615	31546	461.82	
Mizoram	12	24	100.0	1692	7132	321.51	
Nagaland	16	32	100.0	1942	23440	1107.00	
Sikkim	1	4	300.0	607	5128	744.81	
Tripura	11	17	54.5	9431	26008	175.77	

Sources: (i) Selected Education Statistics, Department of Education 1987-88, MHRD, GOI, 1989. (ii) Statistics of Higher and Technical Education 2008-09, MHRD, GOI, 2011.

one university by 2008-09. It generates the hope that creation of universities in all the NE States will strengthen higher education in the entire region.

It is interesting to note that at all India level, while the number of college having general degree (Arts/ Science/Commerce) increased 226.8 % over the two decades; the enrolment went up by 523.58 %. Identical or better trend is observed in case of all the NE States except Manipur, where the number of colleges went by 152.2 % whereas the increase in enrolment was 132.16 %. Interestingly there is phenomenal growth (1107 %) in enrolment in the general courses at the college level courses in Nagaland.

It is observed that out of 262 engineering colleges in entire country, there were only 4 colleges in the NE region (3 in Assam and 1 in Tripura) in 1987-88. Over the two decades in the given period, the number of colleges in the NE region increased to 18. However, the States of Mizoram and Nagaland were still not having single engineering college till 2008-09. It is, hence, desirable that in terms of regional balance and uniform growth of technical education in the country, these two States get due support from DONER to set up atleast one engineering college each. It is observed that so far the State of Assam has got one IIT at Guwahati since 1994 and the

Table 6 (e)

Growth of Engineering and Technology Colleges in NE region (Institutions and Enrolment)

India/NE States	Colleges (Engineering and Technology)			Enrolment(Engineering and Technology)			
	1987- 88	2008- 09	%Change over Two Decades	1987-88	2008-09	%Change over Two Decades	
India	262	2466	841.2	190779	1663619	772.01	
Assam	3	7	133.3	2669	2998	12.33	
Arunachal Pradesh	-	3	300.0	-	1826	-	
Manipur	-	3	300.0	-	130	-	
Meghalaya	-	1	100.0	-	66	-	
Mizoram	-	-	0.00	-	-	-	
Nagaland	-	-	0.00	-	-	-	
Sikkim	-	2	200.0	-	471	-	
Tripura	1	2	100.0	452	383	-15.27	

Sources: (i) Selected Education Statistics, Department of Education 1987-88, MHRD, GOI,1989. (ii) Statistics of Higher and Technical Education 2008-09, MHRD, GOI, 2011.

State of Meghalaya has got one IIM i.e., Rajiv Gandhi Indian Institute of Management since 2008-09. We need to have a streamlined and objective approach for providing technical education to the youth of NE States particularly in view of demographic dividend, which our country is going to have for coming to two decades.

Out of 262 medical colleges in the entire country in 1987-88, the NE region had only 5 medical colleges (3 in Assam, 1 in Manipur and 1 in Tripura). Over two decade's period, the number of medical college in the NE region grew up to 18. However, the State of Mizoram and Nagaland still remained deprived in term of medical education also. Hence, it is desirable

that the assistance of DONER is provided to these two NE States for setting up of one medical college each to promote medical education.

#### Conclusion

From а review of educational development, it is observed that the educational agencies both in the public and private sectors have a big scope for expansion in North Eastern States of the country. Available data indicate that most of the NE states have varying but some number of degree colleges suggesting that the development of education has been starkly uneven from state to state in the region<sup>7</sup>. Following crucial issues need to be addressed for strengthening

Table 6 (f)
Growth of Medical Colleges in NE region (Institutions and Enrolment)

India/NE States	Colleges(Medical)			Enrolment (Medical)			
	1987-88	2008- 09	%Change over Two Decades	1987- 88	2008- 09	%Change over Two Decades	
India	262	2466	841.2	81367	273366	235.97	
Assam	3	7	133.3	1958	2556	30.54	
Arunachal Pradesh	-	3	300.0	0	144	144	
Manipur	1	3	300.0	460	100	-78.26	
Meghalaya	-	1	100.0	0	94	94.00	
Mizoram	-	-	100.0	0	373	373.00	
Nagaland	-	-	100.0	0	0	0.00	
Sikkim	-	2	200.0	0	657	657.00	
Tripura	1	2	100.0	-	30	30.00	

Sources: (i) Selected Education Statistics, Department of Education 1987-88, MHRD, GOI,1989. (ii) Statistics of Higher and Technical Education 2008-09, MHRD, GOI, 2011.

higher education in the NE States of the country; i) college ratio in the NE States is far below that of the national average; ii) the reason is pathetically wanting in terms of availability of the specialised courses such as medicine, veterinary medicine, teacher training, technological college and college offering other vocational courses; iii) lack of proper infrastructure has been a major constraint as a result of these the capable teaching professional shy away from joining the institution in the NE region.

In the past few years there have been considerable efforts at improving the standards and scope of higher education in the region and the role of Indira Gandhi Open University have been pioneering that direction. Through Educational Development of North East Region Unit (EDNERU), IGONU has introduced various need based. custom made courses like Public Policy, Community Cardiology, Health Care, Hospital Waste Management and Food Safety- at the Certificate, Diploma as well as Graduate, Post-Graduate and Doctoral Level for the youth of this region8. In her study on higher education in NER Nasakar has found that one of the most successful features of the IGNOU courses has been introduction of Online Distance Learning (ODL) methods to impart the courses by successful usages of the Information and Communication

Technologies (ICTs). She has also observed that in the restive political scenario of NER, ODL holds the promise to attain a greater and wider reach above the conventional class room-based education as it successful crosses of geographical distance. Local universities like Dibrugarh University and other are also introducing many vocational courses to rise above the poor standards of professional skills of the otherwise educated degree holders. Universities of the region are also increasingly trying to meet demand of vocational training. We see thousands of the students from these States moving to universities and colleges in metropolitian cities such as Delhi, Kolkata, Mumbai, Bangalore, and Chennai etc. From the analysis made in the preceding pages, it may be observed that in spite of effective measures taken by the concerned State Government as well as Union Ministry of HRD, the GER has not been very satisfactory in case of Nagaland and Assam. This implies that some State specific measures are required to be taken by these two States in collaboration with the Ministry of HRD and the same could be taken up by DONER through its non-lapsable fund. It is also a point of special concern in case of Nagaland where GER has been observed to be negative in respect of boys as well as girls at primary stage. It needs to be ensured that the enrolment at primary stage has reached saturation point. Otherwise, it needs proactive measures to be taken to bring the GER in the state at least at average level of NE States.

In order to reduce the regional disparity and for mainstreaming of the entire North Eastern region, emphasis should be laid on strengthening the institutions as well as quality of education at every stage of education i.e., from Primary to University level.

It is important to note here that the new Government at the Centre has taken due note of the fact that resource rich North-Eastern states are lagging behind in development due to poor governance, systemic corruption and poor delivery of public services. It may be recalled that NDA government in its earlier tenure had initiated concrete steps to address the issue of development of Northeast by setting up the Ministry of North-Eastern Region. From the past experience, it can be logically expected that the new Government will strengthen its approach towards North Eastern Region and will take necessary steps for expediting the pace of its mainstreaming of this region.

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