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TRENDS AND PATTERN OF SOCIAL SECTOR EXPENDITURE OF THE NORTH EASTERN STATES OF INDIA

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The eight North Eastern (NE) states of India are often considered as single block of mosaic even though, fault lines on ethnic, cultural, social, and religions divide them significantly. The commonality between them is off-course economic backwardness as all these states are characterised by high rates of poverty, low capital formation, inadequate infrastructure, low industrialisation and nominal manufacturing sector. Another camaraderie observed among these NE states is the role of the state as one of the major engines of growth. This paper attempts to explore the trends and patterns of social sector expenditure of the NE states for the post reform period (since 1991) using the standard fiscal parameters. Further, a detailed examination of the various components of social sector spending has been made along with an attempt to measure the growth rates of public expenditure on health and education by the states using a kinked exponential growth model.

Keywords: *Social Sector; North East India, JEL classification: H75, I18, I28, I38*

INTRODUCTION

The importance of Social Sector for ensuring a robust and inclusive economic development is beyond the doubts of any. Social sector promotes productivity and technological advancement, thereby generating employment opportunities and increased income, which finally leads to better quality of life. Quite a number of empirical studies show that expenditure on social sector in general and education and social welfare in particular have contributed more in growth of GDP (Shultz, 1961; Ram, 1986; Aschauer, 1989), though there a few studies suggesting other way round (Landau 1986; Grier and Tullock 1989). Nevertheless, there is a general consensus that rising educational expenditures and health conditions would enhance economic growth though human capital formation. The state/ government is often expected to play a dominant role in this aspect to address the equity perspective, particularly in the developing countries as poverty can be taken care of only by the state through social spending and not the market forces guided by Pareto optimality (Sengupta, 2009).

Thus, it becomes imperative for the modern government to allocate adequate resources and budget outlay for these sectors. According to the constitution of India, the onus of social sector expenditure (SSE) is more on the state governments and lesser with the union government, though in recent years and particularly after 2004-05, the central government with its flagship programmes have been supplementing the efforts of the states in a big way. However, the existing scenario is on the way for a change particularly after the new government at the Centre and the award of the Fourteenth Finance Commission.

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The 8 North-eastern (NE) states of India accounting for 8% of area and 4% of population are linked to the mainland through the 27 km long Siliguri corridor (GoI, 2008), often known as the chicken's neck. These states, though heterogeneous in ethnicity, language, culture and religion, are bound by the commonality of economic backwardness. Characterised by minimal industrialization, limited gainful employment opportunities, geo-physical isolation and infrastructure bottlenecks, these predominantly agrarian states have been part of the 'Special Category States' earmarked for greater Central government support. The landscape is mostly hilly, though intermittent valleys provide opportunities for limited plain-land agriculture. The people, of which almost 34 % are from the scheduled castes and tribal communities, have higher poverty levels than the national average (GoI, 2008). The development pursuits have witnessed various extra-economic hurdles in the form of ethnic disturbances, insurgency and marginalization. Private entrepreneurship and investment has been limited for economic activities and as a result the government has to play a prominent role which is evident by the fact that, for all NER states, the share of the total expenditure by the state as a ratio to GSDP is higher than the national average. On the other hand, these states are often found to be good performers in terms of social parameters like literacy rates, birth rate, death rate and infant mortality rates. With the near absence of large-scale industries in the region, it is the service sector that is emerging as the mainstay of the economy. As a result, it is human capital based development, which is more necessary for the region. The social sector therefore is of prime importance for building up human capital as well as creating new opportunities and avenues. Therefore, expenditure on social sector assumes greater importance in regions like the North East India, where the state itself often behaves as the engines of growth.

For the present study, we define the social sector as the total of expenditure on 'Social Services' and 'Rural Development' as given in Central and State budgets alike Dev & Mooij (2005). The expenditure accounts in India are generally divided into Revenue[1] and Capital[2] Accounts, both of which are comprise heads named- Social Services and Economic Services. The social sector expenditures consists of i] social services from - a] Education, sports, art and Culture, b] Medical and public health, c] Family welfare, d] Water-supply and sanitation, e] Housing, f] Urban Development, g] Welfare of SCs, STs and Minorities, h] Labour and labour welfare, i] Social Security and Welfare, j]Nutrition, k]Expenditure on natural calamities and l]others and ii] economic services on a] Rural Development and b] Food storage and warehousing. The expenditure under 'Rural Development' relates mostly to anti-poverty programmes. It may be noted here that, the ambit of SSE has the objective of expanding social opportunities and improving the social indicators of education, health and nutritional standards of the general population along with initiate and implement efforts and programmes meant for poverty alleviation and social welfare.

The present study is an attempt to examine the trends and pattern of social sector expenditure of the NER states of India for the post reform period, particularly for the period 2000-01 to 2012-13. In course of the study the specific objectives are to examine the trends and pattern of the SSE of these states and also estimate the rates of growth of SSE, education expenditures and health expenditures of the state governments of the region. It should be noted here that though rates of growth for the social sector expenditures have been computed for the period 1993-94 to 2012-13, the growth rates for expenditures on education and health as well as the analysis for the patterns of expenditure is since 2000-01 owing to paucity of state level data for the yester years. Further, since the 12th Finance Commission had proposed, in 2004-05, for the enactment of the Fiscal Responsibility and Budget Management (FRBM) Act in pursuance of Debt Consolidation and Reform Facility to the states, the growth analysis is undertaken using 2004-05 as the break year.

We find two major approaches for obtaining the growth rates for the sub-periods- a] discontinuous trend lines approach and b] kinked exponential model. The first approach uses separate exponential trend lines fitted by OLS to each segment of the time series for estimating growth rates for sub-periods, while in the second, one uses information regarding the values of the variables in question throughout the time series for estimating the growth rate for a given sub-period using dummy variables. The kinked exponential model is considered a distinct improvement over discontinuous trend lines method [Boyce, 1996].

Assuming that there are two distinct, sub-periods, for our case, (pre FRBM & post FRBM), the following piecewise log-linear model has been utilised for estimating the annual growth rate for each sub-period:

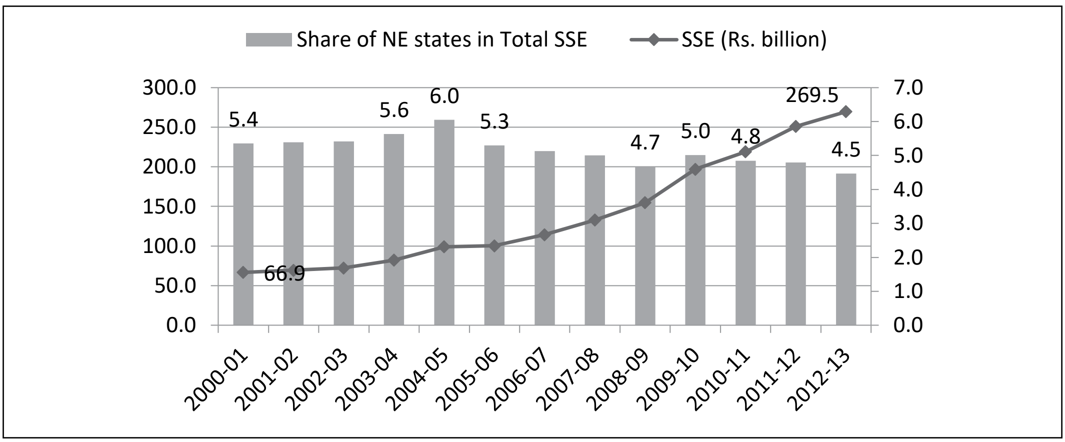
$$\mathbf{Ln\ Qt = a + B^1Z^1_t + B^2Z^2_t + ut;\ where\ Z^1_t = D^1_t t + D^2_t t^1\ \&\ Z^2_t = D^2_t t - D^2_t t^1;}$$

Here t is a trend variable representing time and t^1 denotes the first break in the time period. The OLS estimate of B^i gives us the exponential growth rate for the sub-periods. For the present purpose, we have considered 2004-05 as the break point. The data used in the study is purely secondary in character, obtained from the Reserve Bank of India website. Data in Current prices on public expenditures were collected from the yearly issues of 'State Finances: A Study of Budgets'. For the growth analysis, we have obtained the real rates using the state specific deflators. In course of the analysis, we have also used ratio analysis, Coefficient of Variation, ANOVA along with other suitable graphical representations.

SOCIAL SECTOR EXPENDITURES IN THE NER STATES

The social sector expenditures in the NER states have increased by almost four-fold in between 2000-01 to 2012-13 in absolute terms as seen in Fig 1. SSE by the 8 states of the region had been Rs. 69 Billion in 2001-02 and it shot up to Rs. 269.5 Billion in 11 year period. However, the increase when observed in the context of the total SSE in the country does not appear impressive, as the region's share has come down by 90 basis points from 5.4% to 4.5%. The region's share had been the highest in 2004-05, 6%, which is also the year of introduction of the FRBM Acts by the states.

Figure 1 : Social Expenditures in the NER States (Rs. Billion)



Notes: Share of NE States in secondary axis
Source: Computed

Studies in the all India context had shown that social sector expenditure taken as a proportion of the GSDP has been declining for most of the states, since the 1980s (Prabhu, 1997; UNDP, 1997; Chelliah and Sudarshan, 1999). Dev& Mooij (2005) also observes similar trend in the 1990s. SSE, aggregate of both Revenue and Capital heads generally accounted within 6% to 7.5% of its GDP for the period 1987-88 to 2001-02, which had decreased substantially to 5.2% for the period 2004 to 2008 as seen Table 1. However, since 2008 onwards, the India's spending on the social sector has stabilised around 6%. The NER states however, have a much larger expenditure for social sector as proportion to its GSDP. Mizoram stands at the top among the NER states in this context. Her expenditure has consistently been in the vicinity of 25% and the proportion had been highest for the period 2008-2010 at 26.5%. Interestingly, we find that the proportion of SSE to GSDP has declined substantially for Sikkim from about 26% to 13.3% in 2012-13. On the contrary, Assam has the lowest proportion for the entire period, though it is observed that unlike Sikkim, the share of SSE as proportion to GSDP has increased in the later periods. SSE accounts for more than 15% for Manipur and Arunachal Pradesh, while for Meghalaya, Nagaland and Tripura, it hovers around 12% to 14% of the GSDP.

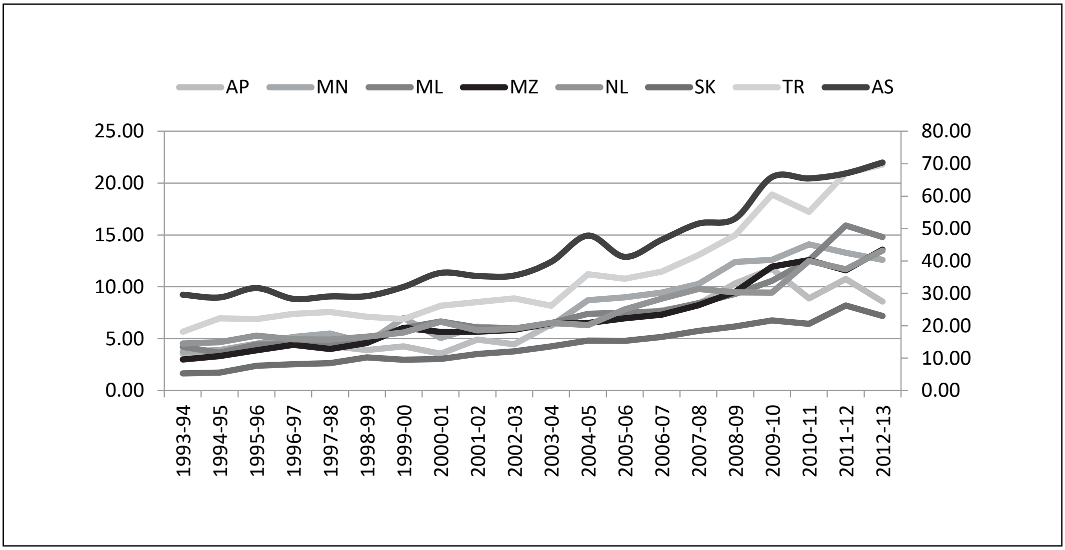
Table 1: SSE/GSDP of the NER States of India

State	2004-08	2008-10	2010-13	2012-13
Arunachal Pradesh	19.7	23.1	18.9	16.4
Assam	8.3	8.9	10.0	8.9
Manipur	16.9	19.1	20.6	16.2
Meghalaya	10.7	10.8	14.5	12.1
Mizoram	24.3	26.5	26.1	25.3
Nagaland	12.2	11.5	14.7	12.6
Sikkim	26.1	20.9	16.5	13.3
Tripura	11.7	13.3	14.1	12.7
All States	5.2	6.0	6.1	6.0

Source: https://www.rbi.org.in

From Fig 1, it was obvious that Social Sector Expenditures have increased in the NE states; however, the growth has not been uniform as seen in Fig 2. Assam, by virtue of being the largest economy in the region has its own unique position and is way ahead of others. The social sector expenditure in Assam had been Rs. 29.56 billion (at 2004-05 prices) in 1993-94 which has more than doubled in 20 years to Rs.70.34 billion. Tripura, being the second largest economy holds onto the second spot in absolute terms for the entire period under consideration- 1993-94 to 2012-13 except for 1999-00, when Manipur was ahead. Expenditures on Social sector has increased from Rs. 5.68 billion to Rs. 21.69 billion, which is almost 4 times the amount two decades ago. The smallest economy of the region, Sikkim lies at the nadir in absolute terms as expected, but in absolute terms its gain has been impressive, from Rs. 1.65 billion to Rs. 7.20 billion, which was almost lower than that of the immediate past year. It is true that all the states show an increasing trend though there are intermittent fluctuations among all of them.

Figure 2: Social Sector Expenditures in the NER States (Rs. Billion @ 2004-05 Price)



Notes: Assam in secondary axis
Source: Computed

The Social Sector Expenditure as a ratio of GSDP has been higher than 25% for Sikkim and Mizoram during 2000-01 to 2004-05, while in the post 2004-05 period it has reduced for both the states, with the decline being higher for the former. Interestingly, apart from these two states, Meghalaya and Tripura also witnessed a decline in the SSE/GSDP ratio, while the remaining 4 states had a different experience with the share in Arunachal Pradesh crossing 20% (Dixit, 2016). The ratio is least for Assam, hovering around 8.0% - 8.5% in average.

Considering the social sector expenditures as proportion of the Aggregate expenditures (AE)/ Aggregate Disbursement (AD) of the state, in Table 2, we find that for the period, 2000-01 to 2012-13, in the NER states, such proportion ranged from 16.3% for Sikkim in 2002-03 to 42% for Tripura in 2000-01. The average proportion of SSE to AE for the entire period has been 33.2% and the average proportion of the NER states is lower than the all India average except for 2003-04 & 2004-05. Occasionally, SSE/AE had been more than 40% for Assam, Mizoram, Meghalaya and Tripura.

However, there are hardly any doubts that these proportions have fluctuated over the years over the period as is evident by the values of the Coefficient of variation. Variation is highest in Sikkim and least in Meghalaya, while the variation has been the maximum during 2001-02 and least during 2010-11. Tripura, Mizoram, Meghalaya and Assam have a comparatively higher proportion of social sector expenditure as compared to the other four states. Basically, these four states can be considered belonging to the same group with average proportion being above 37%. Manipur and Arunachal Pradesh can be clubbed in the second category for having a proportion of 30- 31%; while the remaining two- Nagaland and Sikkim spends less than 30% of its aggregate for social sector. The mean share is highest, 38.09%, for Tripura while it is least for Sikkim, 26.17%. However, Sikkim has been showing an increasing trend since 2008-09 and is likely to catch up fast. The average of the proportion of SSE/AE among the NER states are significantly different (F=34.33, p=0.000; D.f= 7, 96).

Table 3: Social Sector Expenditures as Proportion of Aggregate Expenditures of the NER States

State	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CV
Arunachal Pradesh	26.9	32.5	30.9	28.3	31.2	30.4	30.2	31.1	29.9	33.7	28.1	32.4	30.5	0.062
Assam	40.3	35.5	36.2	35.0	32.4	36.8	38.7	40.0	38.7	36.7	39.5	37.0	36.5	0.060
Manipur	32.5	26.0	26.0	26.0	33.6	34.2	28.7	31.7	32.9	32.5	31.6	29.4	29.3	0.098
Meghalaya	40.6	40.5	35.9	36.2	35.8	38.2	37.6	37.5	35.7	36.6	36.7	39.4	37.7	0.045
Mizoram	39.2	40.7	40.0	35.7	35.6	33.3	34.8	36.7	40.1	41.5	38.6	36.6	39.7	0.068
Nagaland	31.9	26.9	29.6	27.0	27.6	28.6	29.6	29.5	28.3	25.9	28.3	24.9	27.4	0.065
Sikkim	27.3	16.5	16.3	27.5	22.2	23.3	24.3	23.5	27.4	28.8	30.9	36.8	35.4	0.236
Tripura	42.0	39.3	38.4	34.8	37.6	34.0	36.5	36.5	37.2	37.9	38.4	41.7	40.9	0.064
All States	36.8	35.1	32.6	28.4	29.6	33.7	33.9	35.3	37.6	38.7	39.0	38.7	39.3	
CV*	0.18	0.27	0.25	0.14	0.16	0.15	0.16	0.16	0.14	0.15	0.14	0.16	0.14	

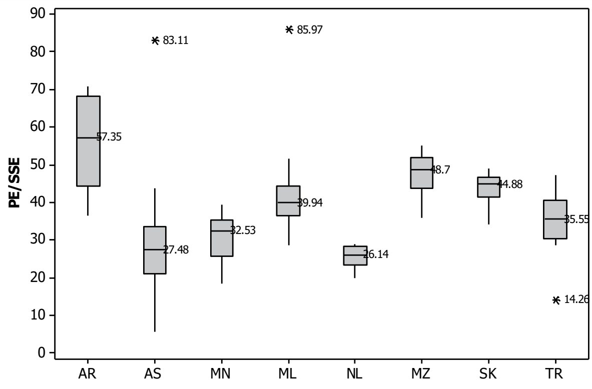
Notes: * Among the 8 NE states only

Source: Computed

On the other hand, looking into the pattern of the social sector expenditures, we find that the largest chunk of SSE is spent in the revenue account (Table 3). The average share of RE in total SSE is among these 8 NER states over the last 13 years under consideration is 82.51%. Over the years, the only exception was Manipur in 2008-09 having spent more than 40% of its total SSE for building capital assets. Assam, the largest state of the region spends more than 97% of its fund as RE, with the ratio being more than 99% in 2002-03 & 2003-04. Interestingly, Nagaland, which has one of the lowest proportion of SSE for its spending has the best rates for capital account and the average spending for revenue account is 74.27%, which is marginally lower than the average of Manipur, 75.72%. Tripura and Sikkim are also found to have spent less than 80% of its total SSE for revenue heads. Arunachal Pradesh, Meghalaya and Mizoram, on an average spends more than 80% of its SSE as RE. Interestingly, during this 13 year period, it was only in 2007-08 and 2008-09, that the average proportion of RE across the states, were less than 80%. It may also be noted that, though, the average proportion of RE in SSE has been significantly different statistically among the states (F=24.88, p=0.000; D.f= 7, 96), the proportions within the states have been fluctuating, with Manipur exhibiting highest instability while Assam being most stable in terms of RE, suggesting that capital outlay for social sector has been the least priority across different budgets. Manipur, had a high proportion of RE in the early 2000s, which had come down since 2004-05 but is showing an increasing tendency after 2010-11. Nagaland also depicts similar story.

The NER states, with such high proportions of RE, has much lower proportion of Plan expenditures[3] (PE) within SSE. The average share of PE in the region is 39.08% and it includes both revenue and capital accounts. Table 4 shows that Plan Expenditures in social sector has been lesser than 40% for most of the states across the years. Arunachal Pradesh stands apart for having a much higher proportion of Plan accounts within its SSE, with the average being 56.44% particularly because of the higher proportions during the period 2001-02 to 2008-09. On the contrary, Nagaland is found to be at the nadir in this context with the proportion of PE never reaching 30% during this century yielding an average of 25.66%. The average proportion of plan spending for Assam and Manipur is around 30, while that of Meghalaya, Mizoram and Sikkim is above 40%. Tripura spends an average of 34% of its SSE under Plan accounts, which is due to an increasing trend since 2008-09. Further from Fig. 3, we observe that there are a few outliers for Assam, Meghalaya and Tripura, which explains the cause of higher CV in respect of these three states.

Figure 3 : Plan share of SSE of the NER States (PE/SSE)



Source: Computed from Table 5

Table 3: Share of RE in Total SSE

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CV
Arunachal Pradesh	83.62	86.90	89.45	90.28	86.80	86.36	81.92	82.64	85.85	88.62	70.82	71.75	84.34	0.073
Assam	98.78	98.75	99.25	99.16	98.90	98.88	96.65	94.91	94.05	92.53	97.83	98.45	98.47	0.023
Manipur	90.66	90.30	86.06	85.25	67.07	84.00	71.05	65.54	59.48	61.40	67.34	75.07	81.19	0.146
Meghalaya	83.94	87.00	86.23	88.60	83.63	82.89	82.89	83.17	78.42	88.54	91.20	85.80	88.63	0.040
Mizoram	85.37	88.11	84.57	78.38	85.94	85.89	82.93	86.80	90.62	88.04	90.76	92.19	88.14	0.042
Nagaland	71.96	73.26	72.14	75.67	73.86	78.07	70.96	69.32	70.48	73.08	78.62	77.31	80.82	0.048
Sikkim	84.62	78.10	81.08	63.77	78.75	75.82	79.06	73.85	74.48	77.47	83.63	76.88	77.26	0.067
Tripura	79.28	75.53	74.05	89.02	69.97	75.61	74.89	76.39	73.93	75.80	83.12	78.83	76.49	0.061
CV	0.09	0.10	0.10	0.14	0.12	0.09	0..11	0.13	0.15	0.14	0.14	0.12	0.08	

Source: Computed

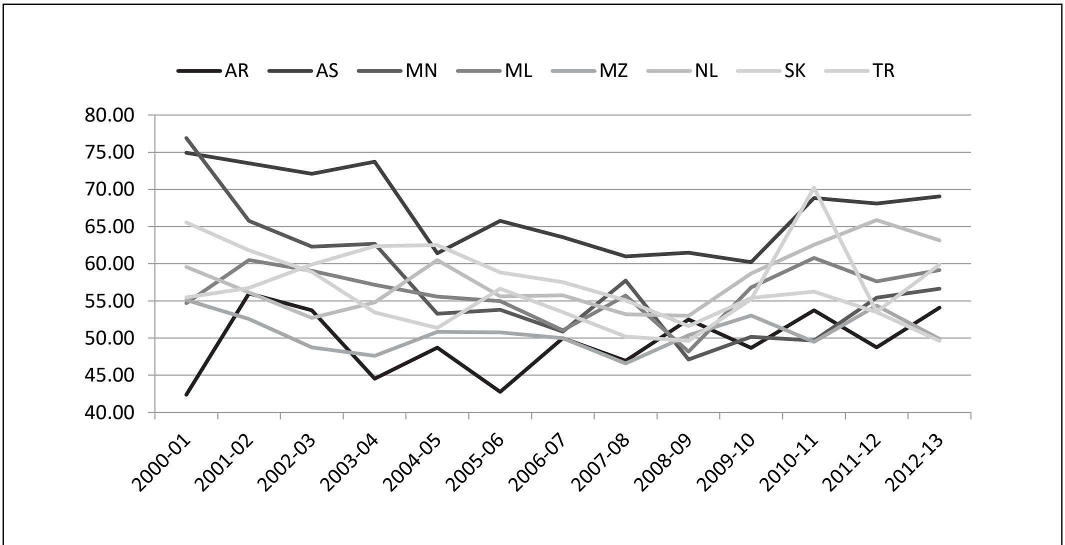
Table 4: Share of Plan Expenditures in SSE

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CV
Arunachal Pradesh	44.22	68.34	65.70	57.35	68.41	70.84	68.29	69.38	53.07	41.46	36.53	45.38	44.74	0.22
Assam	33.20	34.16	31.59	29.76	24.32	27.48	16.80	18.06	24.79	26.68	5.61	83.11	43.98	0.60
Manipur	23.27	23.64	18.49	29.03	27.70	33.46	32.73	32.53	28.80	34.17	39.04	39.38	36.52	0.21
Meghalaya	36.85	30.75	28.83	51.64	39.61	38.58	36.48	41.65	40.39	42.37	39.94	46.53	85.97	0.33
Mizoram	36.06	38.76	43.41	45.45	44.18	51.13	53.11	48.70	49.31	55.08	46.50	50.65	52.64	0.12
Nagaland	25.36	28.78	20.80	27.54	27.06	29.02	28.86	23.71	23.31	26.14	27.99	20.00	25.05	0.12
Sikkim	40.38	45.48	46.02	47.80	44.41	43.32	46.41	47.31	48.94	40.57	44.88	34.17	42.59	0.09
Tripura	35.72	28.74	14.26	32.51	28.97	31.78	34.77	35.55	39.64	37.50	41.84	43.03	47.31	0.24
CV	0.22	0.39	0.45	0.30	0.39	0.36	0.42	0.43	0.33	0.27	0.41	0.43	0.40	

Source: Computed

Among the listed components education comprise the largest chunk of expenditures. In India, the average ratio of expenditures on education to aggregate expenditures of the state government has been 15% for the period 2000-01 to 2012-13, however, among the NER states, only Assam, Tripura and Meghalaya has a higher average ratio than the all India average. Assam leads with an average of 20.65% spending of the aggregate expenditures on education. In terms of health and family welfare, the situation is somewhat different as only Manipur and Sikkim has lower average ratios than the all India average of 4%. Meghalaya leads with an average ratio of 5.62% of spending for health and family welfare.

Figure 4 : Share of Education, Health and Family Welfare in SSE of NER States



Source: Computed

Nevertheless, these two components of social sector account for the bulk of SSE in the NER states. Fig 4 shows that the aggregate of education and health in Assam accounts for more than 60% of the SSE for all years. It is to be noted here that the proportional spending for these activities accounted for more than 70% of the SSE prior to 2004-05 and had reached its lowest point in 2009-10 but has started to pick up since then. Arunachal Pradesh has the lowest average in this context, 49.45%, and is marginally behind Mizoram with 50.72 %. The other five states have an average ratio ranging from 56% to 58%. It should be noted Manipur in the at the turn of the century had spent more than 75% of SSE on education and health, but other activities have increased at an increasing rate as a result, the ratio fell to less than 50% in 2008-09. However, the aggregate shares of these two activities are on the rise since 2009-10. Tripura, on the other hand, started at a lower level and increased spending till 2004-05 and has shifted to other activities post 2004-05 and there is a downward trend visible in this context. Fig 4 shows that there are continuous fluctuations in the ratio for all states across the period and the Coefficient of Variation is highest in Manipur and least for Nagaland.

GROWTH PATTERN OF SSE IN NER STATES

Social Sector expenditures in the NER states, during the 20 year period beginning from 1993-94 have exhibited positive trend, albeit fluctuations in certain years. In this context, it may be noted that with the implementation of the FRBM Acts, the states have committed to maintain certain fiscal targets and discipline, which has provided them an opportunity to rework their expenditure pattern. During the 20 year period beginning with 1993-94, it is seen that Sikkim have registered the highest annual growth rate of the real social sector expenditures, 8.16% and Assam has the least annual growth rate, 5.31%. During the pre- FRBM period, the annual growth rates of the SSE for the 8 states ranged from 3.98% to 8.96%, with Assam and Sikkim being at the bottom and the top respectively. However, the expenditures on Social Sector slowed down in Sikkim to 6.43% in the post FRBM period while for the rest of the states, the growth rate increased and was higher than that of Sikkim. Tripura emerge with the highest rates for the period 2004-05 to 2012-13, 12.15% per annum, followed closely by Meghalaya, with 11.14% per annum. The performance of Tripura in the post FRBM can be considered spectacular, as her growth rate in the pre FRBM period was only 4.57%. Assam, which had the slowest growth prior to FRBM has also increased its rate and has moved ahead of not just Sikkim but also Arunachal Pradesh and Manipur. Further, to note her is that over the entire period, Manipur, Meghalaya and Mizoram exhibit an annual growth rate of above 7% per annum in real terms for social sector. It may be noted here that in terms of Per Capita Social Sector Expenditure[4], Sikkim lead among the NER states, with Rs. 9128.67 per annum, while Assam had the lowest per capita SSE, Rs. 1697.33 per annum for the period 2000-01 to 2011-12 (Dixit, 2016).

Table 5: Growth Rates of Real Social Sector Expenditures in the NER States

	1993-94 to 2004-05	**2004-05 to 2012-13**	**1993-94 to 2012-13**
Arunachal Pradesh	6.38	7.32	6.67
Assam	3.98	8.24	5.31
Manipur	7.02	8.19	7.39
Meghalaya	5.33	11.14	7.13
Mizoram	6.78	9.66	7.68
Nagaland	4.27	9.19	5.80
Sikkim	8.96	6.43	8.16
Tripura	4.57	12.15	6.91

Source: Computed

From Table 6, it is however clear that the rates of growth on public expenditure on education across the NER states have not been uniform. Arunachal Pradesh had witnessed a very high growth rate during pre FRBM period; however, rates have come down to only above 5 % during the post FRBM period. Manipur is also an exception with the growth rates reducing in the second sub period for expenditures on education, while the growth rate for the second period shows an increase for all other states. It should be noted that Meghalaya exhibits the best rates in the second phase, while Nagaland and Mizoram also had double-digit growth for the expenditure on education. Assam with the lowest rates during the 1st sub-period, have also improved from a paltry 0.33% to 7.70%.

Table 6: Growth rates of Real Expenditures in Education and Health & Family Welfare in the NER states

	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Real Expenditure on Education								
2000-01 to 2004-05	18.64	0.33	5.99	0.60	3.41	3.55	5.48	5.27
2004-05 to 2012-13	5.39	7.70	3.67	13.35	11.91	12.42	7.39	8.54
2000-01 to 2012-13	10.30	4.80	4.55	8.26	8.56	8.92	6.65	7.27
Real Expenditure on Health & Family Welfare								
2000-01 to 2004-05	8.03	1.77	1.63	0.11	1.26	4.03	3.67	14.91
2004-05 to 2012-13	7.15	13.91	19.55	14.49	11.13	8.65	13.49	10.14
2000-01 to 2012-13	7.49	9.08	12.31	8.73	7.23	6.85	9.60	11.95

Source: Computed

In terms of expenditure on health and family welfare by the NER states, it is seen that the growth rates have improved for most of the states in the second phase. Manipur has the highest annual growth rate for the entire reference period, 12.31% owing to a stupendous 19.55% annual growth rate during the second phase against only 1.63% during the 1st phase. The growth rates have increased for all the states, except Arunachal Pradesh and Tripura. Tripura, it may be noted had the highest annual growth rates during the 1st sub-period, while the growth rates had declined, it still remained above 10%. Meghalaya had the lowest annual growth rate during the first phase, but had picked up in the second phase.

DISCUSSION

Social Sector expenditures in the NER states have increased at an increasing rate particularly after 2004-05 as has its major component education expenditure and health sector expenditures from the public account. However, such an increase has been visible in the post reform period for almost all states of mainland India, which often attributed to the increased spending by the central government (Shariff, et al, 2002). Huge funds had been allotted to employment generation scheme and rural development projects. Nevertheless, the extent of SSE has been less in- a] terms of proportion of GDP than that was in the late 1980s and b] comparison to other developing countries (Dev & Mooij, 2005). The increased SSE by the central government is again thought to be at the cost lower allocations made from the central plan outlay (Joshi, 2006). Mercy (2007), on the other hand, observes that among the major states, most of the state witnessed a decline in the ratio of SSE/NSDP, during 1980-81 to 2003-04, though in terms of PCSSE all states exhibited significant increase. Goswami & Bezbaruah (2011) have observed that the human development index in the Indian states had been more influenced by the increase in income though PCSSE has also witnessed growth.

In the NER states, we observe that SSE, expenditure for health and expenditure for education have increased since 2000-01 and the growth rates have been generally higher for the post FRBM period. The improved scenario of the health indicators like Crude Birth Rate (CBR), Crude Death Rate (CDR) & Infant Mortality Rate (IMR) for all the states attest to the positive impact of increased spending on social sector and social services in particular. Only Assam and Meghalaya records a worse situation as compared to the national average in the context of CBR, CDR and IMR (SRS, 2013). The improved scenario regarding the education sector is also visible in the declining dropout ratio and increased enrolment ratio among the NER states. The primary school dropout ratio and elementary school dropout ratio are highest in Nagaland and least in Tripura, though for the overall school (Class I to X) dropout ratio, Sikkim, Manipur, Meghalaya overtakes Tripura (DISE, 2014).

The average annual rate of growth of Real GSDP for the NER states during the period 2005-06 to 2013-14 has ranged from 5.11% for Manipur to 16.49% of Sikkim, with Mizoram, Meghalaya and Tripura registering an average between 8% to 9% per annum. Nagaland had an average growth rate of 7.69%, while Arunachal Pradesh and Assam followed with 6.53% and 5.79% respectively (Planning Commission, 2014). Interestingly, average annual growth rate of SSE in all the states, save Sikkim, are higher than the Real GSDP growth. Further, apart from Arunachal Pradesh and Manipur, all other states had a higher rate of growth for expenditures on education, while the growth rates of health and family welfare expenditures have been higher than the real GSDP growth rates for all states.

In this context, it may be noted that the annual growth rate for SSE has been higher than the growth rate of expenditures of both education and health in Tripura and Arunachal Pradesh suggesting increased spending in other components of social sector. Particular mention may be made of MGNREGS which has been of immense importance in Tripura's public expenditure in the last 5years, which is also reflected in the increased per capita NSDP for the state (Bhowmik & Bose, 2015). However, the per capita income has witnessed the highest increase in Sikkim, 15.9% following its very high annual growth rate. Incidentally, Sikkim also has the highest PCSSE in the region followed by Mizoram and Arunachal Pradesh, while Assam, Meghalaya and Tripura are at the bottom in reverse order (Dixit, 2016). It may be further mentioned here that the social sector spending in Meghalaya and Mizoram has been concentrated in Health and education sectors mostly as growth rates for these sectors are higher than that of the aggregate social sector. Assam and Tripura are also the only two states of the region to have a higher ratio of EE/AD[5] for the entire period 2000-01 to 2012-13 mainly because of the large number of educational institutes for catering to the larger population. Meghalaya, similarly, maintains a higher ratio of EH/AD[6] than the national average across the reference period.

However, one cannot ignore the fact that though social sector spending by the states in the NER is on the rise, the expenditure pattern is extremely fluctuating as seen by the Coefficient of Variations. Further, the expenditures are mostly on revenue account. The share of Revenue Account in the SSE for Assam, Meghalaya and Mizoram is much higher than the national average indicating to lesser growth of social infrastructure. Dixit (2016) had also pointed to this aspect and suggested that the states pay more focus towards building social infrastructure. The NER states being revenue deficient depends greatly on the Centre and the increased spending are often due to the implementation of the Central schemes and programmes. It is seen that, in 2012-13, Assam has the lowest ratio in terms of GT/AD[7], 59.3, whereas Manipur, Tripura and Arunachal Pradesh are at the top with 89.4%, 83.5% and 81.2%, respectively. Sikkim has shown a marked improvement since 2004-05 and is placed second after Assam with 64.9% of its aggregate disbursement coming from transfers.

In this context, we have to bring in the context of the Fourteenth Finance Commission and its Award. The recommendations have increased the share of the Central taxes to the states, and the revised devolution formula has altered the receipts of the states. All states in the region, except Assam, are supposed to enjoy a higher share of the Central taxes. The increase has been highest for Arunachal Pradesh 1.042 percentage points, while Assam will lose by 327 basis points. The increased share in Central taxes will increase fund flow to the state but the caveat lies in the restructuring of the Centrally Sponsored Schemes (CSS) and inclusion of the Central share through State Budget as Central Assistance. Most of the NER states, with nominal revenue generation are likely to find it tough to provide the matching grants for the programmes and schemes. Further, the Special Category Status for the NER states will be scrapped. Though all states except Sikkim and Arunachal Pradesh will be receiving deficit grants for the Award period of various dimensions, the states are livid about meeting their budgetary goals and the Chief Ministers of the region have put a joint representation to the Prime Minister for maintaining the Special status of these states.

Nevertheless, the impacts of the increased social sector spending by the states are visible in the form of betterment of outcome indicators like IMR, CBR, CDR, Drop-out ratio and etc. However, achievements have been different among the states as has been the spending pattern, which is often due to the local governance issues.

CONCLUSION

The NER states have witnessed increased social sector spending alike other states in the country in the post reform period and the growth rate for SSE has been higher for the sub-period 2004-05 in general, mostly because of the implementation of the social security and welfare schemes of the centre. The aspect of economic services in the form of expenditures for rural development has also fuelled the growth process, though greater share has been accounted by education and health sub-sectors. The spending patterns of the states have been fluctuating with greater focus on revenue expenditure particularly for states like Assam and Meghalaya. States like Tripura has also witnessed increased SSE owing to larger usage of funds for schemes like MGNREGS. However how far the increased spending influenced has the formation of human capital and enhancement of quality of life in the region is beyond the purview of the present paper. The per capita income and the real GSDP has also increased over the period though the growth patterns seem to differ within the states. But, the big concern which looms large currently is the lack of efforts of the states to increase its own revenue over the years, which appears to be extremely essential in the current framework of central government and its fiscal network. The states should focus on augmenting its own revenue so that it can maintain the momentum of the increased social sector spending in the future.

Notes / References

Notes

1. Revenue expenditure is an amount that is expensed immediately - thereby being matched with revenues of the current accounting period. Routine repairs are revenue expenditures because they are charged directly to an account such as Repairs and Maintenance Expense. Even significant repairs that do not extend the life of the asset or do not improve the asset (the repairs merely return the asset back to its previous condition) are revenue expenditures

2. Capital expenditure is an amount spent to acquire or improve a long-term asset such as equipment or buildings. Usually the cost is recorded in an account classified as Property, Plant and Equipment. The cost (except for the cost of land) will then be charged to depreciation expense over the useful life of the asset.

3. Any expenditure that is incurred on programmes which are detailed under the current (Five Year) Plan of the centre or centre's advances to state for their plans is called plan expenditure. Provision of such expenditure in the budget is called **Plan Expenditure**. Alternatively, it can be said that plan expenditure is that public expenditure which represents current development and investment outlays (expenditure) that arise due to proposals in the ongoing plan. Such expenditure is incurred on financing the Central plan relating to different sectors of the economy. The major items of plan expenditure are- (i) expenditure on electricity generation, (ii) irrigation and rural developments, (iii) construction of roads, bridges, canals and (iv) science, technology, environment, etc. It includes both revenue expenditure and capital expenditure. On the contrary, non-plan expenditure refers to the expenditure provided in the budget for spending during the year on routine functioning of the government. **Non- Plan expenditure** is all expenditure other than plan expenditure of the government and alike Plan expenditure has both Revenue as well as Capital Account. Non-plan revenue expenditure consists of interest payments, subsidies, wage and salary payments to government employees, grants and aids, pensions, police, economic services in various sectors, other general services such as tax collection, social services, and etc. The plan spending generally includes allocation for the social intervention schemes like the Mahatma Gandhi National Rural Employment Guarantee Act, National Rural Health Mission and the Pradhan Mantri Gram Sadak Yojana. Non-plan capital expenditure mainly includes defence, loans to public enterprises, loans to States, Union Territories and foreign governments, which are however, very nominal for the state governments.

4. Rs@ 2004-05 price

5. EE/AD- Expenditure on Education as a ratio to Aggregate Disbursements

6. EH/AD- Expenditure on Medical and Public Health and Family Welfare as a ratio to Aggregate Disbursements

7. GT/AD- Gross Transfers as a ratio to Aggregate Disbursement

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