



ORIGINAL RESEARCH PAPER

Economics

PATTERN OF GROWTH RATES OF GSDP AND EMPLOYMENT IN THE NORTH EASTERN STATES OF INDIA

KEY WORDS: Gsdp, Cagr, Nsso

Samir Debnath

Research Scholar, Department Of Economics, Tripura University.

ABSTRACT

Employment is an important aspect of the growth process of any economy especially developing economies like India. India has witnessed spectacular growth during the last one and half decades and service sector remained the driving force of this growth. However, the same is not replicated in the case of employment. But very few attempts have been made to examine the pattern of growth rates of GSDP and employment with respect to different sectors of the Indian economy especially for the north eastern states of India. It is against this backdrop that the study aims to estimate the growth rates of GSDP and employment for the north eastern states of India during the reform period. This paper provides updated estimates on employment and GSDP growth rates in the north eastern states of India – both aggregate as well as sector specific – using compound annual growth rate (CAGR) approach.

INTRODUCTION AND LITERATURE REVIEW:

Employment is an issue which is directly linked with the growth process of an economy. The growth rate of GDP of an economy influences the growth rate of employment. However, the relationship between economic growth and employment is one of the most debated issues in national strategies. This is because employment does not grow enough with the growth of the economies. A number of studies show that there are strong positive relationship between employment and economic growth (Saltz and Cebula, 2001, Walterskirchen, 1999). A study for middle income countries shows that 1 per cent increase in the labor force causes GDP to grow by 6 per cent (Dewan and Hussein, 2001). Another study indicates that a 1 per cent rise in GDP causes employment to rise by about 1.3 per cent in the long run (RBF, 2001).

In the Indian development planning also, growth of employment emerged as an important concern around the middle of 1970s because employment has not grown at the rate at which GDP has grown. There are various studies relating to growth of the Indian economy and employment. However, it is pointed out that the performance of employment in relation to output growth is the outcome of a range of factors. According to Bhaduri (2008), the employment in relation to economic growth is influenced by sectoral growth rates, sectoral employment elasticities and the initial (base/final year) sectoral weights in output and/or employment composition. According to Papola and Sahu (2012), growth rate accelerated during the period 2004-05 to 2009-10 but employment growth saw a deceleration in India and most new jobs were created in the informal sector with low earnings and no social protection.

In this context, it is important to note that the growth rates of GSDP and employment are used to track sectoral potential for generating employment and in forecasting future growth in employment. The North Eastern Region (NER) of India constitutes 7.9 per cent of country's total geographical area and 3.85 per cent of total population of the country (Census, 2011). NER of India constitutes 3.5 per cent of India's total workforce (NSSO, 2011-12). Per capita gross state domestic product in the region in 2011-12 was Rs. 7045 (at constant 1993-94 prices). Assam is the biggest state in the region accounting about two-third of the population, labour force, and workforce and about 52 per cent of total GSDP of the region according to 2011-12 data. The labour scenario in the NER is quite unique compared to other regions of the country. The region witnessed a rapid expansion of employment in the 1980s and 1990s. Employment in the north east India is mainly dominated in the agriculture and service sectors. There was a sharp rise in the number of registered job seekers between 1989 and 1993 in the region. The rise was almost three times the national level. It was also higher than the national average

in the case of educated job seekers. However, between 1993 and 1996, the rise in unemployed people is low compared to the national growth rates of unemployed.

A number of studies were undertaken on pattern of growth rates of GSDP and employment of India (Rangarajan et. al., 2007; Sundaram, 2001, 2007). However, these studies have mainly focused on major states where Assam is the only state of the north eastern region (NER) (Chadha and Sahu, 2004; Ramaswamy, 2007). **Thus, the issue of the pattern of growth rates of GSDP and employment in the north eastern states of India over time is an important issue which needs investigation.**

RESEARCH ISSUES AND OBJECTIVES OF THE STUDY:

Employment and the growth rate of employment are directly linked with the economic structure of a country. Employment is not only influenced by the overall growth of the economy but also by the growth rate of the various sectors operating in an economy. This is more important for a country like India. Different sectors have different growth rate and hence the employment absorption of the sectors. **This raises many issues like what are the various pattern of growth rates of GSDP and employment in the NER, which needs investigation.**

SPECIFICALLY, THE FOLLOWING ISSUE WILL BE EXAMINED BY THE STUDY-

To examine the pattern of growth rates of GSDP and employment in the north eastern states of India.

In order to examine the above mention objective, the study has gone through the following set of literature. Thomas (2012) in his paper examined the changes in India's labour market during the last three decades and in the 2000s in particular with the help of NSSO reports on employment and unemployment in India. NSSO's 66th round survey data indicates a sharp decline in the net increase in employment in India from 59.5 million during 1999-00 to 2004-05 to 1.25 million during 2004-05 to 2009-10. However, this paper argues that the 'jobless growth' in India during the second half of the 2000s was partly the result of positive changes such as the absolute decline in the number of workers engaged in agriculture and related activities.

Basu and Das (2016) in their paper analyses the phenomenon of jobless growth in India and the United States. The phenomenon of a rapid slowdown in the growth of employment has been observed in many countries across the world over the past few decades. It is often referred to as jobless growth (ILO 2013; Caballero and Hammour 1997; Verme et al 2014). India is no exception to the global trend of declining labour absorption capacity of GDP growth (Papola 2006;

Kannan and Raveendran 2009). The study uses data on employment from the employment-unemployment survey of the NSSO, which is available only every five years. This makes regression analysis infeasible.

Kumar and Bhatt (2012) in their paper examines the employment trends in India during 1983-2010 with the help of various rounds of NSSO quinquennial data. Employment has characterized as an important element in the development agenda in India. But the experience of the last two decades in India showed that employment opportunities created were inadequate in spite of rapid growth. The previous literature like Datt (1994), Bhattacharya and Mitra (1997), Sundaram (2001), Chadha (2001), Visaria (2002), Bhattacharya and Sakthivel (2004), Papola (2005), Unni and Raveendran (2007), Dev (2008), Bhalla (2009), Chandrasekhar and Ghose (2010) have also suggested that the impact of economic reforms on employment has somehow influenced employment growth positively in the short-run, but in long-run the impact is negative to the economy.

Himanshu (2011) in his paper re-examines the trends in employment and unemployment as thrown up by successive National Sample Surveys from the mid-1970s. The objective of the paper is to look at the trends and patterns of changes in the workforce structure over the years and to remove inconsistencies arising out of methodological changes. The primary data source for this purpose will be mainly the employment-unemployment survey (EUS) of the NSSO.

Rangarajan et al (2011) examines the trends in employment and wages as thrown up by the 66th round of the National Sample Survey Organization that was the quinquennial employment-unemployment survey. Economic development is accompanied by a falling share of agriculture in the GDP and employment. In India the former has occurred with agriculture accounting for only about 15 per cent of the GDP (2009-10). However, the pace of shift in employment from agriculture to the other two sectors has been somewhat sluggish in the past. In the period 2004-05 to 2009-10, there was a large shift of workforce out of agriculture which moved into the secondary sector (mainly construction) and tertiary sector.

Mehrotra et al (2012) analyses employment trends and addresses the problem of creating decent and productive employment in the non-agricultural sector during the first decade of the 21st century. Rangarajan et al (2008) in their article explores inter-state variations in the employment scenario. The rich cross-sectional data available in the 61st round are utilized to analyse the growth-employment linkage among states. A comparison of the GDP growth rate and the workforce growth rate did not reveal a consistent pattern. There was also sectoral variations in workforce growth. Though agriculture accounted for a large share in the incremental employment, in terms of growth rate, it turned in a relatively weak performance. The other two sectors delivered robust employment numbers.

After review of literature we found that with respect to objective, i.e., to examine the pattern of growth rates of GSDP and employment in the north eastern states of India the authors mainly adopted the following methodology

They have reported that NSSO does not provide sector-wise number of people employed but sector-wise Workforce Participation Rate (WPR). They have estimated employment numbers by multiplying the workforce participation rate obtained from the NSS with the total population available from the census of India. They have calculated the aggregate of state-wise total workers by applying NSS state-wise WPRs on state-wise census population which is approximately equal to the India workers calculated by applying all India NSS WPRs on all India census population. They have used the CAGR

approach for estimating employment growth rate. They have also used usual principal and subsidiary status (UPSS) for all calculations of the employment numbers. They have calculated sector-wise GDP growth rate by using the sector-wise GDP numbers as given by CSO.

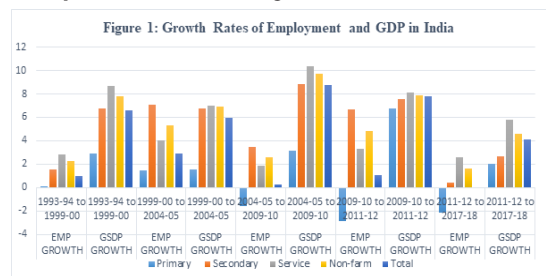
The present study also adopted the same methodology to examine the relation between the variables. The study uses GSDP at factor cost at 2011-12 prices.

It may be mentioned that although population census is conducted only decennially, the mid years population is calculated by using the formula, say for example: population in 1992 = population in 1991 * power (1+growth rate, 1)

Mid years employment figures also calculated by using the above formula. The existing estimates on employment covering all sectors are based on NSSO employment data. GSDP for 2017-18 for north eastern states also calculated by using the above formula. The study covers the period 1993-94 to 2017-18.

PATTERN OF GROWTH RATES OF GSDP AND EMPLOYMENT IN THE NORTH EASTERN STATES OF INDIA.

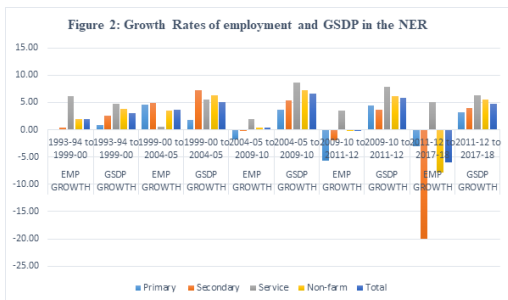
In India, the overall growth rate of GDP (appendix table 1A) is 6.33 per cent which causes 1.84 per cent of employment growth rate during the period 1993-94 to 2004-05. But a high growth rate of GDP of 6.42 per cent causes a low growth rate of employment of 0.22 per cent during the period 2004-05 to 2017-18. Growth rate of employment in the primary, mining and quarrying and financing, insurance, real estate and business services are negative during the period 2004-05 to 2017-18 in the economy. It may be due to the introduction of GST and demonetization of the Indian economy. During 1993-94 to 1999-00, a high growth rate of GDP contributes a low growth rate of employment whereas a low growth rate of GDP contributes a high growth rate of employment during the next period i.e., 1999-00 to 2004-05. Employment growth rate in the mining and quarrying, utilities and community, social and personal services are negative during the period 1993-94 to 1999-00. The growth rate of employment and GDP declines in the services sector during the period 2004-05 to 2017-18 than in the previous period 1993-94 to 2004-05. Employment growth rate in the construction sector is 5.85 per cent whereas GDP growth rate is 4.92 per cent during the period 2004-05 to 2017-18. It implies that construction sector generates more jobs during the period 2004-05 to 2017-18. Growth rate of employment in the farm sector is -2.05 per cent during the period 2004-05 to 2017-18 whereas the growth rate of GDP in this sector is 3.18 per cent during the same period. It is clear that a high growth rate of GDP contributes a negative growth rate of employment in the farm sector during the period 2004-05 to 2017-18. The growth rate of the non-farm sector in both employment and GDP plays an important role in Indian economy which is clear from figure 1



Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GDP (www.mospi.gov.in)

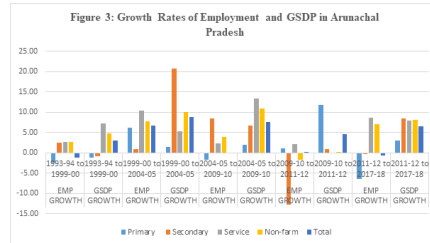
Growth rates of employment and GSDP varies significantly among sectors and states in the north eastern region of India.

The overall growth rate of employment in the NER (**appendix table 1B**) is -3.32 per cent during the period 2004-05 to 2017-18 whereas GSDP growth rate is 5.69 per cent during the same period. It is due to the poor performance of the growth rates of employment in the primary and secondary sectors in the NER during the period 2004-05 to 2017-18. During 1993-94 to 2004-05, a lower growth rate of GSDP contributes a higher growth rate of employment in the NER compared to the next period i.e., 2004-05 to 2017-18. In the NER, at sectoral level, employment in agriculture, construction, utilities, trade, transport, financing and insurance, community etc. witnessed either slowdown or negative growth rates during 2004-05 to 2017-18. In contrast, mining and quarrying, manufacturing grows at a faster rate during 2004-05 to 2017-18. GSDP growth rate in the primary sector increases from 1.29 per cent to 3.60 per cent during the period 1994/05 to 2005/18 but employment growth rate decreases from 2.14 per cent to -2.93 per cent during the same period. This pattern is seen in the secondary sector also. Growth rate of GSDP in the service sector increases during the period 1994/05 to 2005/18 in the NER whereas growth rate of employment decreases during the same period. One interesting fact is that GSDP growth rate in the mining and quarrying sector decreases from 1.95 per cent to -0.84 per cent during the period 1994/05 to 2005/18 but employment growth rate increases from -2.08 per cent to 0.76 per cent during the same period. The growth rate of employment in non-farm sector in NER is -3.58 per cent during the period 2004-05 to 2017-18 whereas GSDP growth rate is 6.23 per cent during the same period. Among the sub-sectors the growth rate of employment in construction is highest (8.54%) during the period 2004-05 to 2017-18 in NER. It may be represented by the following figure 2



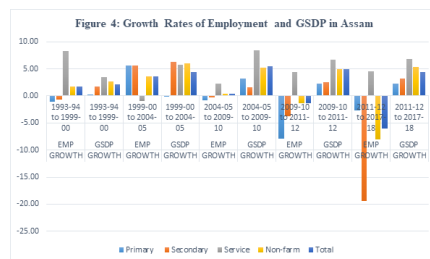
Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

Now let us look at the individual states of the NER. In Arunachal Pradesh, the overall growth rate of GSDP (**appendix table 1C**) increases from 5.61 per cent to 6.63 per cent during the period 1994/05 to 2005/18 but employment growth rate decreases from 2.26 per cent to -0.32 per cent during the same period. This implies that higher growth rate of GSDP contributes a lower growth rate of employment in the state during the period 2004-05 to 2017-18. It is due to the negative growth rate of employment in primary and financing, insurance, real estate and business services sectors in the state during the period 2004-05 to 2017-18. Employment growth rate in the service sector decreases during the period 1994/05 to 2005/18 in the state but GSDP growth rate increases during the same period. It is because of poor performance in the growth rate of employment in financing, insurance, real estate and business services and community, social and personal services during the period 2004-05 to 2017-18. Utilities which includes electricity, water supply, gas etc., contributes a higher growth rate of GSDP whereas the growth rate of employment in this sector is negative during the period 1993-94 to 2004-05. This is shown in the following figure 3



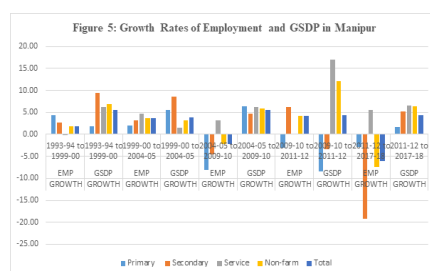
Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

In Assam, the overall GSDP growth rate (**appendix table 1D**) increases from 3.12 per cent to 4.92 per cent during the period 1994/05 to 2005/18 but employment growth rate decreases from 2.56 per cent to -3.42 per cent during the same period. It is due to the negative growth rate of employment in both the farm and non-farm sectors in the state during the period 2004-05 to 2017-18. GSDP growth rate in both the farm and non-farm sectors increases during the period 1994/05 to 2005/18 but employment growth rate decreases in both the sectors during the same period. This is because of the negative growth rate of employment in the industrial sector in the state during the period 2004-05 to 2017-18. Employment growth rate in the construction sector is higher whereas the growth rate of GSDP in this sector is negative during the period 1993-94 to 1999-00 which is shown by the following figure 4



Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

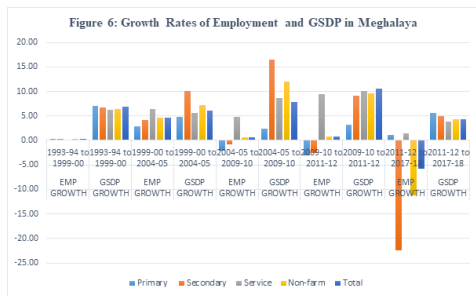
In Manipur, GSDP growth rate (**appendix table 1E**) of 4.76 per cent contributes 2.66 per cent of employment growth rate during the period 1993-94 to 2004-05. But during the period 2004-05 to 2017-18, 4.84 per cent of GSDP growth rate contributes -4.16 per cent of employment growth rate in the state. It is due to the negative growth rate of employment in the primary and secondary sectors in the economy during the period 2004-05 to 2017-18. Growth rate of both GSDP and employment increases in the service sector during the period 2004-05 to 2017-18 than in the period 1993-94 to 2004-05. Both farm and non-farm sector contributes negative growth rate of employment in the state during the period 2004-05 to 2017-18 than in the period 1993-94 to 2004-05. It is interesting to note that the lower growth rate of GSDP in the construction sector contributes higher growth rate of employment in the state during the period 2004-05 to 2017-18 than in the period 1993-94 to 2004-05. The pattern of growth rates of employment and GSDP is shown in the following figure 5



Source: Own estimates based on various rounds of NSS data

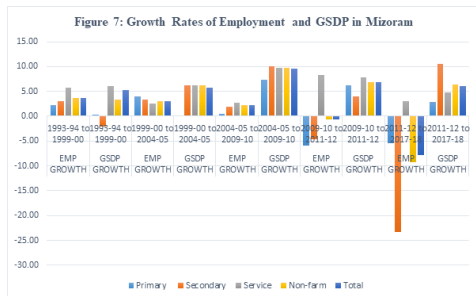
on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

In Meghalaya, the overall growth rate of GSDP (appendix table 1F) of 6.50 per cent contributes 2.22 per cent of employment growth rate during the period 1993-94 to 2004-05 whereas a high GSDP growth rate of 6.60 per cent contributes -2.97 per cent of employment growth rate during the period 2004-05 to 2017-18. It is due to the negative growth rate of employment in the primary and secondary sectors in the state during the period 2004-05 to 2017-18. Within secondary sector, employment growth rate in the mining and quarrying, manufacturing and utilities perform negative growth rate during the period 2004-05 to 2017-18. The relationship between growth rates of employment and GSDP may be shown by the following figure 6



Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

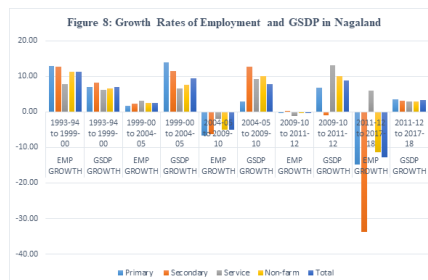
In Mizoram, GSDP growth rate (appendix table 1G) of 5.53 per cent contributes 3.43 per cent of employment growth rate during the period 1993-94 to 2004-05 but a high growth rate of GSDP of 7.51 per cent generates -3.51 per cent of employment growth rate during the period 2004-05 to 2017-18. It is due to the negative growth rate of employment in the primary and secondary sectors in the state during the period 2004-05 to 2017-18. Service sector contributes lower growth rate of employment during the period 2004-05 to 2017-18 than the period 1993-94 to 2004-05. This is because of negative growth rate of employment in the financing, insurance, real estate and business services during the period 2004-05 to 2017-18. GSDP growth rate of both farm and non-farm sectors are 5.06 and 7.76 per cent respectively during the period 2004-05 to 2017-18 but they contribute -3.26 per cent and -3.69 per cent respectively of employment growth rate during the same period. Growth rate of employment in the secondary sector is -11.55 per cent whereas the growth rate of GSDP is 9.29 per cent during the period 2004-05 to 2017-18. Let us consider the following figure 7



Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

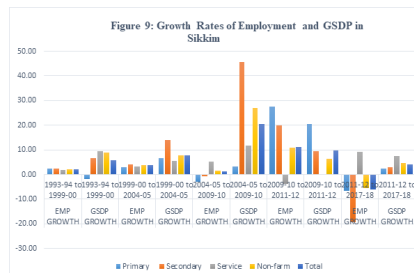
In Nagaland, the overall GSDP growth rate (appendix table 1H) of 8.00 per cent contributes 7.21 per cent of employment growth rate during the period 1993-94 to 2004-05 but GSDP growth rate of 5.82 per cent contributes a negative growth rate

of employment of -8.24 per cent during the period 2004-05 to 2017-18. It is due to the negative growth rate of employment in the primary and secondary sectors of the economy during the period 2004-05 to 2017-18. Within secondary sector, the growth rate of employment in the construction sector is very much negative in the state during the period 2004-05 to 2017-18. Growth rate of GSDP of 6.84 per cent contributes only 1.73 per cent of employment growth rate in the state during the period 2004-05 to 2017-18. It is because of negative growth rate of employment in trade, hotels and restaurants and financing, insurance, real estate and business services during the period 2004-05 to 2017-18. Within service sector, transport, storage, communication and community, social and personal services contribute a strong positive growth rate of employment during the period 2004-05 to 2017-18. A positive growth rate of GSDP of 6.68 per cent in the non-farm sector contributes a negative growth rate of employment of -7.38 per cent during the period 2004-05 to 2017-18 which may be shown by the following figure 8



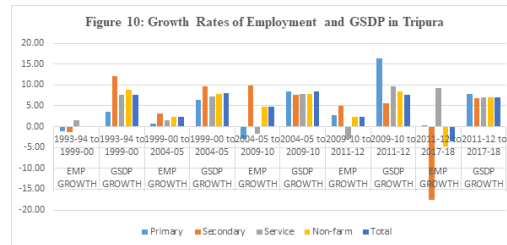
Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

In Sikkim, the overall GSDP growth rate (appendix table 1I) is 7.69 per cent which contributes 3.86 per cent of employment growth rate during the period 1999-00 to 2004-05. But a high growth rate of GSDP of 20.40 per cent contributes only a low growth rate of employment of 1.43 per cent during the period 2004-05 to 2009-10. It is due to the negative growth rates of employment in the primary and secondary sectors in the state during the period 2004-05 to 2009-10. The state has no largescale manufacturing activities. GSDP growth rate of both farm and non-farm sectors are 5.36 per cent and 13.02 per cent respectively during the period 2004-05 to 2017-18 whereas each sector contributes employment growth rate of 5.01 per cent and 4.12 per cent respectively during the same period. It may be noted that GSDP growth rate of 18.82 per cent in the secondary sector contributes a negative growth rate of employment of -7.18 during the period 2004-05 to 2017-18. Mining and quarrying sector has no employment opportunities in the state during the period 2004-05 to 2017-18. Manufacturing sector contributes a higher growth rate of GSDP of 5.36 per cent than that of employment growth rate of -0.52 per cent during the period 2004-05 to 2017-18. As a result the overall growth rate of GSDP of 10.94 per cent contributes a negative growth rate of employment of -0.49 per cent in the state during the period 2004-05 to 2017-18. It may be shown by the following figure 9



Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

In Tripura, the overall growth rate of GSDP (appendix table 1J) of 7.79 per cent contributes 1.07 per cent of employment growth rate during the period 1993-94 to 2004-05. But GSDP growth rate of 7.65 per cent contributes a negative growth rate of employment of -0.20 per cent during the period 2004-05 to 2017-18 in the state. This is because of negative growth rate of employment in the primary and secondary sectors in the state during the period 2004-05 to 2017-18. GSDP growth rate of 9.35 per cent in the primary sector contributes a negative growth rate of employment of -0.60 per cent during the period 2004-05 to 2017-18. GSDP growth rate in the non-farm sector is 7.54 per cent whereas employment growth rate is -0.07 per cent in the state during the period 2004-05 to 2017-18. It may be concluded that the previous period i.e., 1993-94 to 2004-05 performs better growth rate of both employment and GSDP than the period 2004-05 to 2017-18 in the state. In 2011-12 to 2017-18, GSDP growth rate of 7.83, 6.86 and 7.07 per cent in the primary, secondary and service sectors respectively contributes employment growth rate of 0.30, -17.53 and 9.26 per cent in these sectors respectively in the state. Tripura has no largescale industries but it has service sector-led growth during the period 2011-12 to 2017-18. Let us consider the following figure 10



Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

NER performs better result in respect of employment growth rate than India level during the period 1993-94 to 2004-05. But during the period 2004-05 to 2017-18 the performance of employment growth rate in the NER is very much lower than the India level. Employment growth rate decreases in all the north eastern states of India during the period 1994/05 to 2005/18 whereas GSDP growth rate increases in all the north eastern states during the same period, except Nagaland and Tripura. A positive growth rate of GSDP in the primary/farm sector in all the north eastern states of India contributes a negative growth rate of employment during the period 2004-05 to 2017-18. A positive growth rate of GSDP in the non-farm sector in all the north eastern states also contributes a negative growth rate of employment during the period 2004-05 to 2017-18, except Arunachal Pradesh.

APPENDIX

Table 1A: Growth rate of employment and GDP (CAGR) in percent India

	EMP Growth	GDP Growth	EMP Growth	GDP Growth	EMP Growth	GDP Growth	EMP Growth	GDP Growth	EMP Growth	GDP Growth	EMP Growth	GDP Growth	EMP Growth	GDP Growth
Sectors/Period	1993-94 to 1999-00	1993-94 to 1999-00	1999-00 to 2004-05	1999-00 to 2004-05	2004-05 to 2009-10	2004-05 to 2009-10	2009-10 to 2011-12	2009-10 to 2011-12	2011-12 to 2017-18	2011-12 to 2017-18	1993-94 to 2004-05	1993-94 to 2004-05	2004-05 to 2017-18	2004-05 to 2017-18
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	0.02	2.88	1.48	1.56	-1.62	3.17	-2.85	6.79	-2.15	2.02	0.68	2.28	-2.05	3.18
Mining & quarrying	-3.10	5.22	3.09	4.80	1.09	4.08	-3.17	3.27	-4.54	2.62	-0.33	5.03	-2.20	3.28
Manufacturing	1.57	7.34	5.21	6.46	-0.94	10.02	7.05	8.13	-0.37	3.66	3.21	6.94	0.52	6.75
Utilities	-1.75	6.94	3.50	4.22	-0.77	7.08	33.28	6.81	2.30	3.03	0.60	5.70	5.31	5.15
Construction	2.55	6.35	12.97	9.18	11.39	9.14	5.77	8.23	1.47	0.49	7.16	7.63	5.85	4.92
Secondary	1.51	6.73	7.11	6.74	3.47	8.83	6.64	7.56	0.42	2.66	4.02	6.74	2.53	5.75
Trade, hotels & restaurant	6.12	9.17	4.03	7.87	1.26	9.37	1.20	6.46	1.57	8.20	5.17	8.58	1.39	8.38
Transport, storage, communication	5.45	9.39	5.05	12.90	2.42	12.48	6.56	11.01	3.57	5.00	5.27	10.97	3.57	8.74
Financing, insurance, real estate & business services	4.43	8.36	10.71	6.71	6.13	12.04	-27.75	10.68	2.65	5.34	7.24	7.61	-1.50	8.69
Community, social & personal services	-1.42	8.57	2.34	5.00	1.42	8.14	11.03	4.57	3.14	4.70	0.27	6.93	3.64	5.99
Service	2.81	8.70	4.00	7.03	1.87	10.33	3.29	8.11	2.57	5.81	3.35	7.94	2.41	7.88
Non-farm	2.28	7.83	5.28	6.91	2.58	9.70	4.82	7.89	1.59	4.59	3.63	7.41	2.46	7.03
Total	0.98	6.63	2.88	5.98	0.28	8.73	1.02	7.79	-0.09	4.10	1.84	6.33	0.22	6.42

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

Table 1B: Growth rate of employment and GSDP (CAGR) in percent NER

	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth
Sectors/Period	1993-94 to 1999-00	1993-94 to 1999-00	1999-00 to 2004-05	1999-00 to 2004-05	2004-05 to 2009-10	2004-05 to 2009-10	2009-10 to 2011-12	2009-10 to 2011-12	2011-12 to 2017-18	2011-12 to 2017-18	1993-94 to 2004-05	1993-94 to 2004-05	2004-05 to 2017-18	2004-05 to 2017-18
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	0.08	0.85	4.67	1.81	-1.77	3.71	-5.65	4.41	-2.98	3.24	2.14	1.29	-2.93	3.60
Mining & quarrying	-8.86	2.66	6.72	1.11	10.12	-0.75	5.02	1.96	-7.70	-1.84	-2.08	1.95	0.76	-0.84

Manufacturing	0.38	2.85	4.47	10.59	0.95	6.22	13.21	7.98	3.47	4.39	2.22	6.30	3.92	5.64
Utilities	-6.61	1.71	17.42	14.91	-3.87	9.97	-14.90	-5.01	4.78	5.40	3.64	7.51	-1.83	5.43
Construction	9.09	2.04	8.74	12.28	16.75	10.05	16.11	3.31	-0.14	7.49	8.93	6.58	8.54	7.80
Secondary	0.37	2.54	4.86	7.23	-0.25	5.34	-1.94	3.67	-19.91	4.05	2.38	4.64	-10.10	4.49
Trade, hotels & restaurant	4.11	0.08	5.25	6.77	2.96	7.21	8.19	2.00	1.78	6.98	4.63	3.07	3.20	6.28
Transport, storage, communication	8.42	3.03	5.90	6.99	3.92	13.17	-0.97	8.51	8.36	7.03	7.27	4.81	5.16	9.58
Financing, insurance, real estate & business services	12.49	7.67	-7.79	4.52	13.85	9.74	-21.20	12.34	2.01	2.25	2.77	6.23	2.27	6.60
Community, social & personal services	6.81	8.40	-3.07	4.79	-0.01	7.99	1.56	9.61	7.15	7.73	2.20	6.74	3.48	8.12
Service	6.16	4.76	0.57	5.55	1.92	8.59	3.46	7.79	4.99	6.33	3.58	5.12	3.57	7.42
Non-farm	2.01	3.77	3.54	6.28	0.38	7.19	-0.27	6.13	-7.80	5.47	2.70	4.90	-3.58	6.23
Total	1.89	3.01	3.61	5.03	0.34	6.58	-0.26	5.89	-5.99	4.72	2.67	3.92	-3.32	5.69

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospri.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

Table 1C: Growth rate of employment and GSDP (CAGR)in per centArunachal Pradesh

Sectors/Period	EMP Growth 1993-94 to 1999-00	GSDP Growth 1993-94 to 1999-00	EMP Growth 1999-00 to 2004-05	GSDP Growth 1999-00 to 2004-05	EMP Growth 2004-05 to 2009-10	GSDP Growth 2004-05 to 2009-10	EMP Growth 2009-10 to 2011-12	GSDP Growth 2009-10 to 2011-12	EMP Growth 2011-12 to 2017-18	GSDP Growth 2011-12 to 2017-18	EMP Growth 1993-94 to 2004-05	GSDP Growth 1993-94 to 2004-05	EMP Growth 2004-05 to 2017-18	GSDP Growth 2004-05 to 2017-18
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	-2.50	-1.11	6.20	1.45	-1.75	1.98	1.03	11.84	-6.41	3.00	1.36	0.04	-3.52	3.91
Mining & quarrying	-100.00	-4.65	NE	-6.52	NE	12.16	-58.60	-3.31	-100.00	7.51	-100.00	-5.51	NE	7.51
Manufacturing	0.50	3.62	-12.30	2.43	9.13	8.41	-13.74	8.42	7.52	25.18	-5.53	3.08	4.53	15.85
Utilities	-12.80	43.43	15.56	53.29	8.56	6.95	-50.63	-9.24	24.51	9.44	-0.89	47.83	2.45	5.40
Construction	7.04	-2.43	3.45	22.08	5.93	5.07	-3.33	10.25	-4.47	4.84	5.39	8.03	-0.42	5.74
Secondary	2.42	-0.80	0.92	20.75	8.52	6.74	-12.80	0.98	-0.37	8.54	1.74	8.47	0.87	6.65
Trade, hotels & restaurant	18.76	-1.58	6.95	1.44	1.74	7.82	10.04	16.84	13.61	-2.83	13.24	-0.22	8.36	4.05
Transport, storage, communication	-30.90	12.79	38.53	7.42	20.11	13.15	-26.25	6.59	33.56	8.63	-5.20	10.32	17.02	10.02
Financing, insurance, real estate & business services	-13.52	9.04	26.31	2.69	-7.61	14.27	-42.02	9.76	19.30	1.26	2.73	6.11	-3.23	7.40
Community, social & personal services	2.29	9.65	10.38	6.50	1.59	14.24	3.19	-5.04	2.56	10.79	5.89	8.21	2.28	9.48
Service	2.76	7.21	10.36	5.32	2.38	13.41	2.09	-0.17	8.65	7.99	6.14	6.35	5.18	8.72
Non-farm	2.65	4.77	7.85	10.04	3.84	10.95	-1.70	0.21	7.03	8.18	4.98	7.13	4.42	7.96
Total	-1.27	2.95	6.67	8.90	-0.02	7.60	0.13	4.67	-0.73	6.48	2.26	5.61	-0.32	6.63

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospri.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

NE = Not estimated

Table 1D: Growth rate of employment and GSDP (CAGR)in per centAssam

Sectors/Period	EMP Growth 1993-94 to 1999-00	GSDP Growth 1993-94 to 1999-00	EMP Growth 1999-00 to 2004-05	GSDP Growth 1999-00 to 2004-05	EMP Growth 2004-05 to 2009-10	GSDP Growth 2004-05 to 2009-10	EMP Growth 2009-10 to 2011-12	GSDP Growth 2009-10 to 2011-12	EMP Growth 2011-12 to 2017-18	GSDP Growth 2011-12 to 2017-18	EMP Growth 1993-94 to 2004-05	GSDP Growth 1993-94 to 2004-05	EMP Growth 2004-05 to 2017-18	GSDP Growth 2004-05 to 2017-18
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	-1.14	0.21	5.66	-0.13	-0.88	3.21	-7.86	2.27	-2.71	2.24	1.90	0.06	-2.83	2.62
Mining & quarrying	-13.01	2.16	8.90	0.79	4.58	-1.49	15.42	0.24	-6.25	-2.06	-3.66	1.54	0.95	-1.49
Manufacturing	2.35	2.85	1.05	10.67	2.08	-0.01	17.98	4.84	3.43	2.70	1.76	6.33	5.01	1.97
Utilities	-9.71	0.50	24.32	19.79	-5.51	-1.30	-50.59	-2.04	16.75	7.28	4.42	8.85	-5.71	2.45
Construction	17.74	-1.19	8.87	10.83	7.48	10.86	28.10	3.14	7.51	8.31	13.62	4.11	10.44	8.47
Secondary	-0.69	1.78	5.58	6.29	-0.33	1.62	-3.73	2.47	-19.45	3.25	2.11	3.81	-10.14	2.50
Trade, hotels & restaurant	4.41	-1.50	4.24	7.85	2.74	7.23	10.41	-0.20	1.33	7.31	4.33	2.64	3.23	6.09
Transport, storage, communication	11.47	1.36	4.76	6.81	1.36	13.19	0.40	7.73	7.85	5.71	8.37	3.80	4.15	8.84
Financing, insurance, real estate & business services	18.14	8.68	-11.19	3.06	13.50	10.33	-17.83	13.39	2.86	1.52	3.77	6.09	3.20	6.62

Community, social & personal services	10.19	8.36	-5.79	4.75	1.55	6.65	0.38	9.42	6.97	10.04	2.62	6.70	3.83	8.63
Service	8.31	3.50	-1.00	5.73	2.29	8.35	4.41	6.64	4.47	6.74	3.97	4.51	3.61	7.34
Non-farm	1.71	2.61	3.59	6.01	0.39	5.14	-1.31	4.87	-8.04	5.38	2.56	4.14	-3.85	5.21
Total	1.70	2.09	3.61	4.38	0.39	5.50	-1.34	4.93	-5.99	4.43	2.56	3.12	-3.42	4.92

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

Table 1E: Growth rate of employment and GSDP (CAGR) in percent Manipur

Sectors/Period	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth
	1993-94 to 1999-00	1993-94 to 1999-00	1999-00 to 2004-05	1999-00 to 2004-05	2004-05 to 2009-10	2004-05 to 2009-10	2009-10 to 2011-12	2009-10 to 2011-12	2011-12 to 2017-18	2011-12 to 2017-18	2013-14 to 2018-19	2013-14 to 2018-19	2014-15 to 2018-19	2014-15 to 2018-19
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	4.40	1.90	2.08	5.57	-8.12	6.41	-2.99	-8.49	-2.80	1.60	3.34	3.55	-4.91	1.77
Mining & quarrying	46.16	0	-7.17	NE	-13.12	NE	16.95	NE	-10.09	NE	18.91	0	-7.60	NE
Manufacturing	-5.60	7.48	8.12	3.81	-3.09	8.05	10.60	5.47	1.31	2.15	0.41	5.80	0.95	4.89
Utilities	-100.00	2.91	NE	-0.55	NE	7.26	NE	19.83	-9.96	-9.27	-100.00	1.32	NE	0.99
Construction	-6.46	14.22	19.72	13.10	25.52	3.26	31.23	-13.77	-15.29	11.15	4.64	13.71	5.40	3.91
Secondary	2.60	9.36	3.26	8.62	-4.50	4.70	6.26	-3.42	-19.25	5.27	2.90	9.02	-10.15	3.67
Trade, hotels & restaurant	3.64	4.28	9.37	4.67	8.30	6.30	-8.07	0.59	0.15	14.17	6.21	4.46	1.86	8.93
Transport, storage, communication	2.09	6.55	9.78	1.87	-3.28	13.23	34.26	9.07	5.22	8.42	5.52	4.40	5.76	10.35
Financing, insurance, real estate & business services	-14.29	5.30	4.79	5.84	8.09	7.09	-29.86	10.89	7.33	1.55	-6.09	5.55	0.80	5.06
Community, social & personal services	-1.23	7.35	1.30	-1.53	-0.02	4.59	3.24	30.15	9.16	4.57	-0.08	3.22	4.63	8.16
Service	-0.11	6.22	4.70	1.51	3.25	6.25	0.07	17.05	5.49	6.58	2.05	4.05	3.78	8.00
Non-farm	1.88	6.83	3.63	3.18	-2.22	5.84	4.17	12.12	-7.47	6.34	2.67	5.16	-3.75	7.01
Total	1.86	5.48	3.63	3.90	-2.24	5.53	4.21	4.42	-6.07	4.41	2.66	4.76	-4.16	4.84

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

NE = Not estimated

Table 1F: Growth rate of employment and GSDP (CAGR) in percent Meghalaya

Sectors/Period	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth
	1993-94 to 1999-00	1993-94 to 1999-00	1999-00 to 2004-05	1999-00 to 2004-05	2004-05 to 2009-10	2004-05 to 2009-10	2009-10 to 2011-12	2009-10 to 2011-12	2011-12 to 2017-18	2011-12 to 2017-18	2013-14 to 2018-19	2013-14 to 2018-19	2014-15 to 2018-19	2014-15 to 2018-19
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	0.33	7.05	2.94	4.73	-2.09	2.32	-3.04	3.20	1.18	5.52	1.51	5.99	-0.74	3.92
Mining & quarrying	5.56	10.71	18.40	6.64	19.14	1.68	-6.98	11.99	-16.63	-9.07	11.21	8.84	-2.73	-1.99
Manufacturing	-0.50	3.85	35.69	15.28	-6.59	28.44	-5.98	6.63	-3.47	8.16	14.57	8.90	-5.07	15.30
Utilities	-29.71	1.20	79.76	8.78	-12.26	3.48	-29.39	-1.94	3.97	0.32	7.71	4.58	-8.23	1.17
Construction	2.48	11.18	3.46	8.03	20.34	13.06	5.33	23.63	9.43	4.44	2.92	9.74	12.84	10.50
Secondary	0.36	6.77	4.09	10.08	-0.75	16.47	-2.62	9.08	-22.45	4.89	2.04	8.27	-11.69	9.86
Trade, hotels & restaurant	0.29	7.69	5.91	7.39	7.90	9.03	18.45	10.49	-4.20	3.48	2.81	7.55	3.61	6.65
Transport, storage, communication	5.31	6.80	5.93	10.43	17.70	11.05	-2.04	9.85	4.68	11.50	5.59	8.44	8.39	11.07
Financing, insurance, real estate & business services	4.36	4.33	0.55	4.03	9.61	4.82	22.97	9.65	-10.12	2.43	2.61	4.19	1.80	4.43
Community, social & personal services	-0.69	6.65	6.93	4.11	0.33	9.86	4.93	9.92	5.28	2.16	2.71	5.49	3.30	6.24
Service	0.09	6.28	6.44	5.58	4.74	8.59	9.49	10.03	1.41	3.88	2.93	5.96	3.90	6.61
Non-farm	0.31	6.45	4.57	7.21	0.55	11.95	0.76	9.57	-11.15	4.37	2.22	6.80	-5.00	8.03
Total	0.31	6.91	4.56	6.00	0.59	7.90	0.72	10.52	-5.72	4.27	2.22	6.50	-2.97	6.60

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

Table 1G: Growth rate of employment and GSDP (CAGR) in percent Mizoram

Sectors/Period	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth
	1993-94 to 1999-00	1993-94 to 1999-00	1999-00 to 2004-05	1999-00 to 2004-05	2004-05 to 2009-10	2004-05 to 2009-10	2009-10 to 2011-12	2009-10 to 2011-12	2011-12 to 2017-18	2011-12 to 2017-18	2013-14 to 2018-19	2013-14 to 2018-19	2014-15 to 2018-19	2014-15 to 2018-19
	1	1	2	2	3	3	4	4	5	5	6	6	7	7

Primary	2.31	0.35	3.98	0.01	0.47	7.32	-5.87	6.21	-5.40	2.83	3.07	0.19	-3.26	5.06
Mining & quarrying	49.81	24.80	-42.50	-3.45	58.43	9.12	-18.14	16.83	25.97	-4.92	-3.06	11.06	28.76	3.48
Manufacturing	3.31	-3.58	8.20	3.27	2.37	6.02	-18.51	19.19	14.08	2.70	5.50	-0.52	3.90	6.37
Utilities	-100.00	-9.63	NE	4.61	NE	2.25	202.33	8.64	0.35	17.63	-100.00	-3.42	NE	10.10
Construction	12.53	14.93	-6.64	8.97	22.60	15.80	7.75	0.14	-1.26	6.53	3.38	12.18	8.76	8.96
Secondary	2.97	-2.08	3.33	6.24	1.96	10.00	-4.69	3.96	-23.36	10.53	3.13	1.62	-11.55	9.29
Trade, hotels & restaurant	7.95	-1.33	2.86	-0.40	2.98	10.15	13.77	0.00	-0.61	8.30	5.61	-0.91	2.87	7.68
Transport, storage, communication	16.51	7.54	5.99	12.44	10.38	8.07	8.21	11.40	8.67	8.55	11.61	9.74	9.25	8.80
Financing, insurance, real estate & business services	49.19	10.17	-3.71	9.77	-20.03	10.03	-22.57	9.70	2.50	2.30	22.26	9.99	-10.77	6.34
Community, social & personal services	3.49	10.50	2.37	7.66	2.48	9.71	5.54	9.63	4.39	3.70	2.98	9.20	3.83	6.88
Service	5.70	6.07	2.53	6.26	2.78	9.72	8.33	7.89	3.08	4.77	4.24	6.16	3.76	7.13
Non-farm	3.73	3.41	3.09	6.26	2.20	9.80	-0.61	6.84	-9.29	6.40	3.44	4.69	-3.69	7.76
Total	3.70	5.30	3.11	5.81	2.20	9.64	-0.61	6.86	-7.83	5.99	3.43	5.53	-3.51	7.51

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mosp.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

NE = Not estimated

Table 1H: Growth rate of employment and GSDP (CAGR) in percent Nagaland

Sectors/Period	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth
	1993-94 to 1999-00	1993-94 to 1999-00	1999-00 to 2004-05	1999-00 to 2004-05	2004-05 to 2009-10	2004-05 to 2009-10	2009-10 to 2011-12	2009-10 to 2011-12	2011-12 to 2017-18	2011-12 to 2017-18	1993-94 to 2004-05	1993-94 to 2004-05	2004-05 to 2017-18	2004-05 to 2017-18
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	12.96	7.05	1.76	13.84	-6.73	2.88	-0.42	6.86	-14.92	3.51	7.72	10.09	-9.70	3.78
Mining & quarrying	-22.22	10.71	-100.00	48.43	NE	10.93	28.19	2.27	-12.15	8.78	-100.00	26.49	NE	8.57
Manufacturing	21.28	3.85	20.53	7.26	-17.69	16.48	15.77	-8.13	13.80	-0.86	20.94	5.39	0.73	4.26
Utilities	34.15	1.20	-2.59	11.16	-2.24	11.87	66.81	14.57	-1.93	-0.11	15.99	5.61	6.29	6.56
Construction	-0.97	11.18	11.37	11.21	11.96	12.43	-12.66	-3.30	-35.66	4.10	4.46	11.19	-16.55	6.02
Secondary	12.60	8.28	2.35	11.41	-6.26	12.71	0.02	-0.89	-33.79	3.11	7.82	9.69	-19.35	6.05
Trade, hotels & restaurant	0.78	7.69	25.42	2.51	-6.98	10.20	-2.94	8.19	-0.09	-5.08	11.31	5.30	-3.23	2.57
Transport, storage, communication	13.81	6.80	13.68	4.05	6.11	9.44	-14.11	11.55	10.09	4.71	13.75	5.54	4.48	7.55
Financing, insurance, real estate & business services	17.65	4.33	5.23	9.81	-33.51	9.24	-100.00	9.26	NE	0.58	11.83	6.78	-10.66	5.16
Community, social & personal services	9.26	6.65	-5.75	7.06	0.40	8.80	2.19	17.50	7.91	5.61	2.16	6.84	4.08	8.59
Service	7.87	6.26	3.08	6.65	-2.06	9.21	-1.26	13.17	6.06	2.91	5.66	6.44	1.73	6.84
Non-farm	11.26	6.59	2.54	7.52	-5.10	9.96	-0.36	10.09	-11.42	2.95	7.21	7.01	-7.38	6.68
Total	11.28	6.91	2.52	9.33	-5.06	7.70	-0.41	8.83	-12.69	3.31	7.21	8.00	-8.24	5.82

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mosp.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

NE = Not estimated

Table 1I: Growth rate of employment and GSDP (CAGR) in percent Sikkim

Sectors/Period	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth
	1993-94 to 1999-00	1993-94 to 1999-00	1999-00 to 2004-05	1999-00 to 2004-05	2004-05 to 2009-10	2004-05 to 2009-10	2009-10 to 2011-12	2009-10 to 2011-12	2011-12 to 2017-18	2011-12 to 2017-18	1993-94 to 2004-05	1993-94 to 2004-05	2004-05 to 2017-18	2004-05 to 2017-18
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	2.56	-1.75	3.06	6.53	-2.84	3.32	27.50	20.45	-6.61	2.42	2.79	1.93	-0.52	5.36
Mining & quarrying	-9.56	-0.55	-8.15	5.54	15.36	15.14	-84.56	31.23	47.60	10.22	-8.92	2.18	-5.14	15.14
Manufacturing	-5.62	1.31	7.44	4.62	-1.47	79.49	28.24	26.81	14.96	3.50	0.10	2.80	10.18	31.97
Utilities	28.74	11.39	-12.65	15.23	12.28	49.68	34.50	-13.88	-9.38	2.11	7.93	13.12	4.57	15.23
Construction	2.71	7.47	20.28	17.54	7.31	5.44	-14.29	14.53	3.14	2.88	10.35	11.94	1.79	5.58
Secondary	2.31	6.78	4.10	13.87	-0.73	45.57	20.04	9.54	-19.45	3.08	3.12	9.95	-7.18	18.82
Trade, hotels & restaurant	3.27	0.14	9.35	6.29	0.96	3.47	3.33	16.51	13.01	15.32	5.99	2.89	6.73	10.79
Transport, storage, communication	9.21	12.89	11.87	10.57	14.45	12.53	-10.29	8.95	3.20	10.44	10.41	11.83	5.10	11.01
Financing, insurance, real estate & business services	24.93	5.86	-2.93	6.29	24.02	10.55	-62.63	8.52	38.82	3.50	11.39	6.05	8.63	6.94

Community, social & personal services	0.24	13.14	-0.98	4.52	4.58	13.30	-1.97	-5.71	7.08	7.04	-0.32	9.13	4.68	7.29
Service	1.93	9.52	3.30	5.47	5.37	11.74	-3.73	0.27	9.08	7.60	2.55	7.66	5.59	7.99
Non-farm	2.17	8.79	3.83	7.82	1.52	27.07	10.91	6.36	-5.56	4.60	2.92	8.35	-0.47	13.02
Total	2.15	5.80	3.86	7.69	1.43	20.40	11.07	9.73	-5.93	3.99	2.92	6.66	-0.49	10.94

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

Table 1J: Growth rate of employment and GSDP (CAGR) in percent Tripura

	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth	EMP Growth	GSDP Growth
Sectors/Period	1993-94 to 1999-00	1993-94 to 1999-00	1999-00 to 2004-05	1999-00 to 2004-05	2004-05 to 2009-10	2004-05 to 2009-10	2009-10 to 2011-12	2009-10 to 2011-12	2011-12 to 2017-18	2011-12 to 2017-18	1993-94 to 2004-05	1993-94 to 2004-05	2004-05 to 2017-18	2004-05 to 2017-18
	1	1	2	2	3	3	4	4	5	5	6	6	7	7
Primary	-1.14	3.59	0.80	6.35	-2.99	8.45	2.84	16.41	0.30	7.83	-0.26	4.83	-0.60	9.35
Mining & quarrying	-100.00	15.01	NE	3.14	NE	7.28	26.35	16.45	-8.60	4.04	-100.00	9.46	NE	7.12
Manufacturing	-6.44	0.52	9.83	8.39	8.39	2.02	1.02	3.43	2.33	12.27	0.63	4.02	4.41	6.85
Utilities	-26.82	37.81	26.58	5.59	-100.00	8.99	NE	-13.11	30.66	4.49	-6.12	22.10	6.58	3.23
Construction	2.90	19.47	9.80	22.76	32.89	10.74	7.12	6.53	-15.28	6.62	5.98	20.95	4.44	8.17
Secondary	-1.22	11.99	3.15	9.68	9.77	7.55	5.04	5.51	-17.53	6.86	0.74	10.94	-4.45	6.91
Trade, hotels & restaurant	2.96	5.55	2.51	4.07	3.86	4.06	-2.42	8.72	7.11	6.18	2.75	4.88	4.34	5.74
Transport, storage, communication	-4.59	7.96	9.46	10.27	12.44	23.09	-12.01	11.56	12.22	11.24	1.56	9.01	8.18	15.71
Financing, insurance, real estate & business services	-1.10	10.28	-1.79	11.95	41.88	11.99	-34.25	14.13	-9.30	9.11	-1.41	11.04	2.53	10.97
Community, social & personal services	1.60	8.65	0.42	7.65	-9.96	7.06	3.32	8.30	10.79	5.90	1.06	8.19	1.20	6.71
Service	1.50	7.71	1.56	7.17	-1.77	7.92	-3.02	9.66	9.26	7.07	1.53	7.46	2.97	7.79
Non-farm	0.08	8.78	2.37	7.89	4.84	7.81	2.31	8.45	-4.74	7.01	1.11	8.37	-0.07	7.54
Total	0.01	7.59	2.37	8.03	4.83	8.37	2.37	7.68	-3.64	7.06	1.07	7.79	-0.20	7.65

Source: Own estimates based on various rounds of NSS data on employment and unemployment and CSO, GSDP (www.mospi.gov.in)

Note: EMP = Employment, GSDP = Gross state domestic product

NE = Not estimated

REFERENCES

- Bhalla, G.S. (2008), "Globalisation and Employment Trends in India", The Indian Journal of Labour Economics, Vol. 51, No. 1.
- Census (2011); Government of India.
- Government of India (2012), 12th Plan document, Chapter 22 on Employment and Skill Development, 2012.
- Himanshu (2011): "Employment Trends in India: A Re-examination", Economic & Political Weekly, Vol 46, No 37.
- Islam, I., and Nazara, S. (2000), "Estimating employment elasticity for the Indonesian economy", International Labour Office, Jakarta.
- Mehrotra et al., (2012) : "Creating Employment during the 12th plan", Economic & Political Weekly, 47(19), pp 63-73.
- Mehrotra et al., (2013), "Turnaround in India's Employment Story: Silver Lining Amidst Joblessness and Informalisation?", Economic & Political Weekly, Vol. XLVIII, No 35.
- Misra, S and A K Suresh (2014): "Estimating Employment Elasticity of Growth for the Indian Economy," WPS (DEPR): 06/2014, RBI Working Paper Series, Department of Economic and Policy Research, Reserve Bank of India.
- NSSO (1997): Employment and Unemployment in India, 1993-94, 50th Round (July 1993-June 1994), Report No 409 (New Delhi: National Sample Survey Organisation, Department of Statistics).
- (2001): Employment and Unemployment Situation in India 1999-2000, Parts I & II, 55th Round (July 1999-June 2000), Report No 458 (New Delhi: National Sample Survey Organisation, Ministry of Statistics and Programme Implementation).
- (2006): Employment and Unemployment Situation in India 2004-05, Parts I & II, 61st Round (July 2004-June 2005), Report No 515 (New Delhi: National Sample Survey Organisation, Ministry of Statistics and Programme Implementation).
- (2011a): Key Indicators of Employment and Unemployment in India 2009-10, 66th Round (July 2009-June 2010) (New Delhi: National Sample Survey Organisation, Ministry of Statistics and Programme Implementation).
- (2011b): Employment and Unemployment Situation in India 2009-10, 66th Round (July 2009-June 2010) (New Delhi: National Sample Survey Organisation, Ministry of Statistics and Programme Implementation).
- (2013): Key Indicators of Employment and Unemployment in India 2011-12, 68th Round (July 2011- June 2012) (New Delhi: National Sample Survey Organisation, Ministry of Statistics and Programme Implementation).
- (2019): Periodic Labour Force Survey in India 2017-18, Annual Report (July 2017- June 2018) (New Delhi: National Sample Survey Organisation, Ministry of Statistics and Programme Implementation).
- Papola T.S. and Partha Pratim Sahu (2012), "Growth and Structure of Employment in India: Long-Term and Post-Reform Performance and the Emerging Challenge", Institute for Studies on Industrial Development, New Delhi, March.
- Rangarajan, C., Kaul, P.I. and Seema (2007), Revisiting Employment and Growth, ICRA Bulletin (Money & Finance), Volume III, No. 2, September, New Delhi, pp.57-68.
- Rangarajan, C., Kaul, P.I. and Seema (2008), "Employment Performance of the States", ICRA Bulletin (Money and Finance), November, 2008.
- Thomas, Jose Jayan (2012) 'India's Labour Market during the 2000s- Surveying the changes', Economic and Political Weekly, vol 67, no 51, December 22.