



INSTITUTE OF DISTANCE EDUCATION **IDE**  
Rajiv Gandhi University



MAECO-507

# North-East Economics

MA ECONOMICS

4th Semester

Rajiv Gandhi University

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**MA (ECONOMICS)**  
**MAECO-507**  
**NORTH-EAST ECONOMY**

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PAPER NO: MAECO-507

North East Economy

SYLLABI

Mapping  
in Book

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Agricultural Practice in the region: Permanent cultivation, shifting cultivation and its effects, jhum cultivation and the problem of induction of new technology. - Land Tenure and Problem of Agricultural credit - Land Use Pattern and Cropping Pattern in Northeast India- Need for land reform with reference to Arunachal Pradesh - Agricultural Productivity in Northeast India

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## INTRODUCTION OF THE BOOK

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India is developing economy. The economic stagnation and vicious circle of poverty was the characteristic of the India economy prior to liberalization. Rapid economic activities and a higher level of income altogether achieved in the last few decades under the impacts of economic planning in India. An attempt was made in this book to describe the India economy in general and North-East Economy in particular.

The book is divided into ten units and each unit has explained the vital characteristic of India economy.

In unit one, the learners will acquaint themselves with the trended of national income in Indian Economy. They will also learn the extent of employment and unemployment, the changing structure of the Indian Economy, including various pertinent issues of Indian Economy.

Agriculture plays a crucial role in the economy of India. It provides livelihoods to a large section of the population; more than half of the populations of the country are engaged in agriculture sector directly or indirectly. The second unit discusses agricultural performance: Growth and productivity, economic reforms and their impact on agriculture, agricultural policy and institutional reforms.

The evolution of the Indian Industry since independence, Industrial Policy of 1948 and 1956, the role and growth of Public Sector, the impact of Economic Reforms on the Industrial Sector and the emergence of the disinvestment Policy is elaborately discussed in unit three of this book.

The availability of physical infrastructure defines country wellbeing. Thus, unit four discussed the types, problems and the policies of infrastructure finance in India.

The students are expected to acquaint themselves about the various facets of public finance. Thus, the fifth unit of this book comprehensively discusses the trends in revenue and expenditure of central and state governments, public debt, characteristics of tax reforms, deficit financing and price behavior, foreign capital and MNCs in India.

In the unit sixth, we have discussed the North-East economy. The region constitutes around 7.9 percent of the total area of the country but it contains only 3.8 percent of the population of the country as per 2011 census. Topographically the region is a mixture of hills and plains. Thus, the unit sixth deals with the North-East economy.



Agriculture in India is considered to be the backbone and also regarded as the largest sector of the country economic activity. Obviously, in the case of North-East India also the agriculture is the backbone of the state economy in the absence of industry. The unit seventh of this book explained the agriculture situation in Northeast India, the extent of Jhum Cultivation and its effects, land tenure, land use pattern and cropping pattern in North-East India.

Further, the development of the secondary and tertiary sector in Northeast India is been discussed in unit eighth and Fiscal issues of North Eastern states in unit ninth and tenth.

By bringing out this book, we are quite confident that the contents in this book will meet the needs of a wide range of readers.

## UNIT –I

### STRUCTURE OF NORTH EAST ECONOMY

#### Structure

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#### 1.0. Introduction

In this unit you will learn about the economy of North East India. This region constitutes eight states like Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The region constitutes around 7.9 percent of the total area of the country but it contains only 3.8 percent of population of the country as per 2011 census. Topographically the region is a mixture of hills and plains while Arunachal Pradesh, Meghalaya, Mizoram, Nagaland and Sikkim are almost entirely hilly. On the other hand, Assam is basically a plain area. At the same time Manipur and Tripura have both plain areas and hilly tracts. Wide variation in altitude coupled with abundance of rainfall has given rise to wide variations in climatic conditions within the region. This in turn has endowed the region with rich biodiversity. The richness of biodiversity of the region is almost matched by its ethnic diversity. The coexistence of the diversity of physical and culture development is to be normally found in the organisation of economic life of the people of the region. However all the states in this region are an interdependent economic system, both for historical and

geo-political reasons. The North Eastern Council (NEC) which was set up in 1971 was the result of the recognition of this economic interdependence. At the same time the region has been facing various challenges towards all-round development. These challenges cut across the spheres of economy, society and polity. This unit / module will focus on the characteristics of North-East economy, its economic system, the relative economic performance of states of the region as well as the natural resource base and status of the human development etc.

### **1.1 Objectives**

After reading this unit you will be able to know:

- An overview of North East economy.
- Basic features of North East economy.
- Relative economic performance of the North Eastern Region and its constituent status in the country.
- Its structural transformation of Arunachal economy.
- Natural Resource Base of North Eastern Region.

Status of Human development of North Eastern Region.

### **1.2. North East Economy – An Overview**

A brief introspection of the evolution of the region and its economy in decades after independence may serve as a very useful reference in analyzing the impact of the more recent events such as the liberalization process set in motion in 1991.

In August 1947, when India attained independence from the British rule, the North Eastern Region consisted of three broad administrative units. For example, Manipur and Tripura were the two princely States and the rest of the region was Undivided Assam province. The administrative arrangement throughout the then Assam province was not uniform. While the plain areas were under effective administration of the provisional government. The tribals inhabited in hill areas were left out of administration. Indeed the hill areas were classified as ‘excluded’ or ‘partially excluded’ areas. Shifting or ‘Jhum’ cultivation based, self-contained village, was the typical organization of economic life of the hill tribes. On the other hand, the population of the plains of Assam, Manipur and Tripura

were by and large dependent on agriculture. However, in contrast to the hills, the people in the plains practised settled cultivation with rice as the main crop. The Assam plains had a significant modern non-agricultural sector, which was developed during the British Raj by foreign capitalists for the purpose of colonial exploitation of the region's rich natural resources. This sector consisted of tea industry based on plantation, mining of coal and oil and oil refining based on minerals, plywood industry etc.

The development in many states of North East India is a post-independence phenomenon since the process of political and administrative reorganization of the region began only after independence. The constitutional provisions, such as district councils for integrating erstwhile excluded and partially excluded areas did not lead to desired levels of development and fulfill the aspirations of the newly emerging political leadership of many of the hill tribes inhabiting those areas. Consequently, the movement for greater autonomy, separate statehood soon came up. The central Government responded to some of these movements by effecting several rounds of political reorganization of the region, which resulted in the emergence of the present set-up of seven full fledged states. Sikkim which was annexed in 1975 was included in the region in the nineties.

Thus, there emerged a large number of structurally similar but semi-insular traditional economies into a single economic system i.e. North East economy. This is the economic manifestation of a political process. This political process, evolutionary in nature and democratic in operation, integrated not only a large number of tribes and sub-tribes inhabiting the region, but also integrated them into the plain areas of the region.

### **1.3. Basic Features of the North-East Economy**

We have equipped ourselves with the introspection of the evolution of North-Eastern region and its economy and we can now have a brief glimpse of the basic characteristic features of North East Economy. These are as follows:

**a). Large Incidence of International Border:** The region consists of 7.9 percent of total geographical area of the country but it contains more than 20 percent of international border of the country. In fact, all the states of North East India have international border. The large international border isolated the region geo-politically. It was left with over 4500 km of external frontier with Bhutan, China, Myanmar and Bangladesh but no more than a slender 22 km connection with the India mainland. The net effect of all this is the weakening of the market linkages of the region with the rest of the country.

**b). Rapid Growth of Population:** One of the basic features of the region is the rapid growth of population in these areas. From the census data of different decades, it is found that the region's growth rate of population is much higher than that of India. One of the reasons for the rapid growth of population is immigration. The population influx from across the border has largely impacted not only the demographic composition of the region but also their polity and economies leading to a prolonged disturbed situation in several parts of the region. This, in turn, has vitiated its environment for investment and growth.

**c). Frequent Occurrence of Natural Calamities:** Another important feature of the region is the frequent occurrence of natural calamities like flood, landslides etc. The region consists of 7.9 percent of total area of the country but it also contains around 18 percent of total flood prone areas of the country. The reasons for frequent occurrence of landslide in hilly areas, and floods in plain areas of the region, is that of deforestation with high intensity of rainfall in upstream leading to increased surface water runoff, and soil erosion. On the other hand, high soil erosion in upstream leads to greater sedimentation in downstream, which causes the rise in river bed and therefore to higher incidence of bank erosion and floods. Frequent occurrence of flood and erosion continue to be the major obstacles towards development of an agrarian economy of the region.

**d). Infrastructural Deficiency:** There is a broad consensus that the North East lacks the basic minimum physical, social and administrative infrastructure for development of the region. Physical infrastructure such as transport and communication, power, irrigation and market access are grossly inadequate to generate a dynamic growth process. Road is the basic means of communication in North East India. However, the average road density in the region is much lower than that of the country. Another important observation is that surface road as a percentage of road length is only around 30 percent. However, the most important feature is that most of the States of the region do not have lateral road communication. The remoteness and terrain involves large unit cost as well as maintenance cost. According to one estimate, the cost of construction of one km of road in hilly areas of the region is five times higher than that in the plains, (Sarma, 2018). Thus, the infrastructural deficiency which has become an inherent feature of the North East has contributed to low productivity and growth in different sectors of the economy of the region.

**e). Unharnessed Resource Endowments:** It is a well known fact that North East India is a highly natural resource endowed region. For example, the region consists of 7.9 percent of total area of the country, but it contains around 25 percent of total forests of the country. According to one estimate, the region also has hydropower generation potentials of 57,000

MW i.e. 60 percent of the country's total potentials. The North East is also endowed with mineral resources like petroleum, and natural gas, limestone etc. Thus, the per capita availability of natural resources in the region is one of the highest in India but the region is lags behind in industrial growth and overall economic development. Thus, the case of North East amply clarifies that the availability of natural resources does not necessarily lead to industrialization of the location. In contrast, States like Gujarat, is not as richly endowed with natural resources but has prospered as location of industries.

**f). Lack of Industrialization:** The process of industrialization in Assam started quite early i.e. more than one century back. For example, crude oil production and its refining, as well as tea plantation and plywood industry, are a few old resource based modern industries of the region. However, both oil and tea industries have not induced any industrial growth based on their backward and forward linkages. This is supported by the fact that contribution of industrial sector to the region's GDP is less than 10 percent. In some hilly states like Arunachal Pradesh it is even less than five percent. Till the nineties, in the hilly states, there were a good number of wood-based industries, but the Supreme Court's restriction on felling of trees led to the closure of these industries.

**g). Imperfection in Factor Markets:** In the North Eastern States, the factor markets are working to their disadvantage. For example, the absence of land market particularly in the hilly states act as a serious impediment to investment. The labour market has also been largely distorted by heavy population influx. The credit market started growing in the seventies in many hilly states but the legal framework regulating the credit is yet to be institutionalized.

**h). Dependence on Common Property Resources:** A feature which distinguished many hilly states of North East India from many other, is the dependence on common property resources (CPRs) mainly forests. For example, many studies in the past showed that in several areas around 30 percent of consumption expenditure of the households were derived from CPRs. The dependence was very high in the past but in recent years it has declined owing to shrinking of the CPRs. Two factors led to the decline of CPRs. One is the establishment of individual property rights and the other is rapid deforestation in the region.

#### **1.4 Relative Performance of North East Economy / Economic Performance of the Region.**

The per capita income (PCI) or per capita NSDP is regarded as a relatively good measure of economic condition performance of a region / State. A region / State with a high

PCI is considered as rich. On the other hand if the level of PCI is low, it is considered as poor. However, the question of high or low comes in two ways (i) comparison of region's PCI with Nation's PCI and comparison of different states of the region. (ii) comparison of present PCI of the region / State with those in the past.

In order to examine the relative performance of North Eastern Region, the percentage ratios of per capita NSDP of the region and its constituent states to PCI of the country was calculated for four decades, depending on the availability of data. The details are furnished in table 6.1.

**Table 6.1**  
**Per Capita NSDP at Current Prices of North Eastern States as Percentage of India's NNP Per Capita at Current Prices**

Year	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura	Sikkim	NE
1980-81	96.37	78.77	87.05	83.49	79.07	88.83	80.18	NA	80.38
1990-91	108.31	85.91	79.79	87.8	89.79	98.33	67.63	NA	85.23
2000-01	87.19	61.04	76.75	78.49	95.41	80.6	85.88	95.28	68.51
2010-11	112.84	61.24	52.46	81.01	94.32	102.88	85.24	201.72	98.96

Source: 1. Handbook of Statistics of Indian Economy, Reserve Bank of India

2. Economic Survey of India from various issues.

Note: The regional NDP per capita has been estimated as the weighted average of NDP per capita of the seven states with respective population shares as the weights.

From table 1.1, it is clear that throughout the entire period NDP per capita of the region remained below India's per capita income. In fact immediately after the post reforms period i.e. during 1990-91 and 2000-01 the gap has widened from 85.23 percent in 1990-91 to 68.51 percent in 2000-01. However, the gap is drastically reduced in 2010-11 due to rapid increase of per capita NSDP of Sikkim, Nagaland and Arunachal Pradesh. The regional trend is shared by more populous State of Assam, Manipur and Tripura in the region. However, in contrast to broad regional trends, in Arunachal Pradesh, Nagaland and the per capita NSDP had crossed or nearer two India's NNP per capita in eighties and generally remained nearer to India's figure in the following decades. On the other hand, Sikkim's per capita NSDP is more than double than that of the country in 2010-11.

The analysis of growth in terms of per capita income has its usefulness. However, in that analysis the picture of growth trends across states gets somewhat clouded because the population growth rates in the different States in the region have been quite uneven in the recent decades. In order to capture the relative performance of the States in the region purely in terms of economic growth, the available NSDP figure at current prices of the region and its constituent states have been expressed as percentage of India's NSDP at current prices. These ratios approximately show the percentage shares of the North Eastern states in India's national income. The trend in the ratios is shown in table 6.2. To summarize the trends annual

compound growth rates in these shares over the entire period 1980-81 to 2000-01 have been estimated.

**Table 6.2**  
**Trends in the Percentage Shares of North Eastern States in India's National Income at current Prices**

Year	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura	Sikkim	NE
1980-81	0.08	1.94	0.17	0.15	0.05	0.09	0.22	NA	2.71
1990-91	0.1	2.11	0.17	0.17	0.07	0.13	0.2	NA	2.94
2000-01	0.09	1.58	0.15	0.19	0.05	0.09	0.25	0.06	2.52
2010-11	0.12	1.56	0.12	0.19	0.08	0.16	0.25	0.1	2.61
*Annual Compound Growth Rate(%)	0.115	-1.799	-0.546	1.152	2.748	3.471	0.378	-	-0.898

Note:\* The annual compound rate has been taken to be the parameter b in the equation  $Y = a + bt$  where Y is share in India's NNP and t is time going from 1980-81 to 2000-2001.

Sources: 1. Handbook of Statistics of Indian Economy, RBI  
2. Economic Survey of India from various issues.

The trends in share of the North East states in India's national income revealed roughly the same story as trends in the ratios of per capita income. For the region as a whole the share had improved initially during 1981-91 but declined during 1991-2001 and again marginally improved during 2001-2011. Among the states, Assam and Manipur had a constant decline after 1990-91. However, Tripura and Meghalaya improved its shares in India's national income. For states like Arunachal Pradesh, Sikkim, Mizoram and Nagaland, there was significant improvement in their shares between 2000-01 to 2010-11.

Thus, the region, in general and the States like Assam and Manipur, in particular clearly left behind in this period of accelerated economic growth of the country. The smaller states (in terms of population) like Arunachal Pradesh, Sikkim, Nagaland and Mizoram have excelled by growing even faster than the country in terms of per capita income. Meghalaya and Tripura have not done badly in terms of purely economic growth, though these two states have not succeeded to imparting their relative position in terms of per capita income. However, a more detailed enquiry into the source of prosperity of these smaller states reveals that their impressive growth performance has not gone hand in hand with rapid development of their economies. The high growth rates are not propelled by growth of agriculture or manufacturing or even by trade and commerce but by expansion of such activities as public administration and construction. It was financed by liberal fiscal transfers from the centre to



those special category states. Such high growth rates, unless stimulated by genuine economic rules are unlikely to be sustainable for long.

### **1.5. Level and Growth of NSDP and per capita NSDP of Arunachal Pradesh**

So far we touched the concepts of NSDP and per capita NSDP, in analysing the performance of North East economy. Let us now discuss the level and growth of NSDP and per capita NSDP of Arunachal Pradesh. Before coming for discussion, let have a glance of Arunachal economy. Arunachal Pradesh the then North East Frontier Agency (NEFA) started the journey to development only after independence of the country. Prior to the independence of the country no modern developmental process was initiated. In fact, at time of independence, Arunachal economy was basically a mono-economy characterized by subsistence agriculture and a few cottage industries. After independence the Government of India took steps to start developmental programmes and in 1953 NEFA was brought under First Five Year Plan. In the fifties, the Government of India followed a policy of least intervention with regard to socio-political autonomy, a revivalist approach towards tribal customs and traditions and a protectionist welfare approach towards economic development of the states popularly known as Nehru-Elwin policy of tribal development. However, this policy of development was shifted to the policy of progressive integration since Indo-Chinese border conflict in 1962 i.e. at the beginning of Third Five Year Plan. In order to make forthcoming plans fruitful, the National Council of Applied Economic Research (NCAER) was requested in 1964 to undertake a techno-economic survey of the territory and to recommend suitable programmes to be undertaken. The report was published in 1967 and development of physical infrastructural facilities, industrialization and modernization were the ingredients of the policy suggested in the report. Thus, the actual process of economic development was started in the territory from the seventies only. Although the first population census was conducted in the territory in 1961 but reliable economic data was available from 1971 only. Hence our analysis of level and growth of NSDP and per capita NSDP of the States will be limited from seventies only. The level of per capita income of Arunachal Pradesh as compared to India's, per capita NNP was furnished in table 6.3.

**Table 6.3**  
**Level of Per Capita NSDP of Arunachal Pradesh with Per Capita NNP of India at Constant Price**

Period	Per Capita NSDP (In Rupees)	Per Capita NNP (In Rupees)	Percentage
1970-71	2843	5002	56.9
1980-81	4010	5342	75.0
1990-91	6939	7321	94.8
1993-94	8866	7690	115.3
2000-01	9171	10308	89.0
2004-05	9427	11799	79.9

Source: (1) Estimates of State Domestic Product of Arunachal Pradesh, Different Years,

(1) Directorate of Economics and Statistics, Government of Arunachal Pradesh, Itanagar.

(2) Economic Survey 2004-05, Government of India, New Delhi.

Table 6.3 shows that in 1970-71, Arunachal per capita income was only 56.9 percent of India's per capita income. In 1980-81, Arunachal's per capita increased by around 75 percent as compared to that of India's per income by only 3.40 percentage during period and as a result Arunachal's per capita income became 75 per cent of India's per capita income. During eighties, India's per capita income increased by 73 percent income but Arunachal's per capita income increased by 77 per cent and as a result in 1990-91, Arunachal's per capita income became 94.8 percent of India's per capita income. In 1993-94 Arunachal's per capita income became 15.3 percent higher than that of India's per capita income. After 1993-94 the Arunachal economy slowed down relative to Indian economy and this was reflected in declining relative position of Arunachal's per capita NSDP. For example in 2004-05, Arunachal's per capita income become 79.9 per cent lower than that of India's per capita income.

The growth rate of per capita NSDP is the difference between the rates of growth of NSDP are rate of growth of population. Table 6.4 shows the growth of NSDP and per capita NSDP as compared with those of India.

**Table: 6.4**  
**Growth Rate of NSDP of Arunachal Pradesh as Compared with the Growth Rate of India (Percent per Annum)**

Period	Arunachal Pradesh		India	
	NSDP	Per Capita NSDP	NNP	Per Capita NNP
1971-1980	7.07	4.14	3.36	1.1
1981-1990	7.81	4.69	4.99	2.83
1991-2000	4.81	2.4	5.93	3.95
2001-2004	2.79	0.4	6.01	4.29

Note: Growth rate is the estimated value of b in  $\log Y = a + bt$ , expressed in their percentage, Y is NSDP or NNP and per capita values and t is time measured in years.

Source: (1) Estimates of State Domestic Product of Arunachal Pradesh, Different Years, and Directorate of Economics and Statistics, Government of Arunachal Pradesh, Itanagar.

(2) Economic Survey 2004-05, Government of India, New Delhi.

Table 6.4 shows that in the seventies, the Arunachal economy performed very efficiently. Its growth rate was above the national average. NSDP grew at the rate of 7.07 percent per annum during the period against the growth of national income at 3.36 per cent. However, due to rapid growth of population, Arunachal's per capita income grew only at 4.14 percent against the 1.10 percent growth of per capita National income. In the eighties, both Arunachal and Indian economy moved forward but Arunachal economy was ahead of the National. However, the situation was different during the nineties onwards. The growth rates of both national income and per capita national income were much higher than those in Arunachal Pradesh.

### **1.6 Changing Sectoral Composition in State Income and Sectoral Contribution to the Growth of Income.**

The sectoral composition of income in Arunachal over the period 1970-71 to 2009-10 shows a sharp decline in the share of the primary sector and a big increase in the share of services sector. In recent years, the service sector in Arunachal Pradesh has come to occupy a predominant position in the state's income, a position that is higher than agriculture, the traditional occupation of the people. For example, in 2009-10 the contribution of services sector was 43.98 percent which was 13.28 per cent higher than that of primary sector. The details are furnished in Table 6.5.

**Table 6.5**  
**Changes in Sectoral composition of Net State Domestic Product in Arunachal Pradesh: 1970-71 to 2009-10**  
**(Percentage)**

Sl. No.	Sub-Sectors and Sectors	1970-71	1980-81	1990-91	2003-04	2009-10	Changes during 1970-2010
1	Agriculture and Sectors	38.33	36.91	35.09	27.43	28.7	-9.63
2	Forestry and logging	20.72	10.23	9.59	3.73	13.99	-6.73
3	Fishing	0.04	0.08	0.72	1.07	0.35	0.31
4	Mining and Quarrying	0.1	0.06	0.79	1.41	2.04	1.94
	Primary Sector	59.19	47.28	46.19	33.64	30.74	-28.45
5	Manufacturing	0.85	6.51	6.64	2.49	2.32	1.47
6	Construction	19.58	18.69	17.98	17.9	18.58	-1
7	Electricity, gas and Water	-0.1	-2.99	-2.46	-0.25	4.36	4.46
	Secondary Sector	20.33	22.21	21.36	20.64	25.27	4.94
8	Transport, Storage and Communication	1.55	0.36	0.65	7.16	3.9	2.35
9	Trade, Hotel & Restaurants	1.96	4.42	4.95	4.82	3.93	1.97
10	Banking & Insurance	0.1	0.6	1.49	2.93	3.7	3.6
11	Real Estate, Ownership of Dwelling & Business Service	0.79	7.79	5.29	2.31	2.67	1.88
12	Public Administration	9.98	10.36	8.16	17.79	14.86	4.88
13	Other Sector	6.1	6.98	11.71	11.21	14.92	8.82
	Tertiary Sector	20.48	30.51	32.25	46.22	43.98	23.5
	Net State Domestic Product	100	100	100	100	100	0

*Source: Calculated on the data from estimates of State Domestic Product of Arunachal Pradesh, Different years, Directorate of Economics and Statistics, Government of Arunachal Pradesh, Itanagar*

Table 6.5 shows that Arunachal economy experienced a significant structural transformation. In 1970-71, the primary sector was the most important sector in the economy. Its contribution to NSDP was as high as 59.19 per cent. During last forty years (1970-71 to 2009-10) its contribution sharply and steadily declined. In 2009-10, the contribution of primary sector declined by 28.45 percentage points as compared to 1970-71. The decline in primary sector was not translated into rise of the secondary sector. Its relative contribution remained the same and its position was marginally improved in 2009-10. However the figure is misleading, the major contribution of the secondary sector came from construction. The contribution from manufacturing sector was reducing after 1990-91 and it stood only 2.32 percent 2009-10. It was finding that the decline in primary sector was compensated by rapid growth of services sector. Infact the share increased from 20.48 percent in 1970-71 to 43.98 percent in 2009-10. This happened basically data rapid six in share of public administration and other sectors.

If we briefly look into the sectoral contribution to the growth of income, it was found from Human Development Report of Arunachal Pradesh, 2005 that during 1970-71 to 2001-02, agriculture contributed more prolifically to the growth of Arunachal economy than any other service. Though the growth of agriculture was net very high as compared to other sectors, yet the size of the sector has meant a substantial contribution during the period. Agriculture accounted for 35.97 per cent of Arunachal's NSDP and 32.08 per cent of Arunachal economic growth come from agriculture. Infact, the primary sector as a whole is responsible for 39.92 per cent of economic growth during the period. The overall contribution of the secondary sector was 21.98 per cent of the state's economic growth. The remaining 38.30 percent came from services sector. In this sector, public administration formed the largest sub sector and it formed 11.15 per cent growth of NSDP of the State.

### 1.7 Natural Resource Base – Land, Mineral Water and Forest.

(a) **Land:** Land is an important natural resource. However, most of the North Eastern states are land – scarce economies, though the total geographical area is large. The density of population ranges from 17 persons per square km (Arunachal Pradesh) to 397 (Assam) in 2011. In fact, the density of population in North Eastern states except for Assam is less than the national average. However, in the states like Arunachal Pradesh, Manipur, Meghalaya, Mizoram and Nagaland, the hilly terrain constitutes more than 90 percent of the total geographical area and thus the plain land available for cultivation is around 5 percent only. We may have an idea of agricultural land resources of the North East region from Table 1.6.

**Table 6.6**  
**Land Availabilities in North – Eastern Region 2010-11**

State	Geographical Area in hectare	Net Sown Area (000 ha)	Per Capita Net Shown Area (ha)	Per cent of Net Sown Area to Geographical Area
Arunachal Pradesh	8,374,300	212000	0.15	2.53
Assam	7,843,800	2,811,000	0.09	35.84
Manipur	2,232,700	233000	0.09	10.44
Meghalaya	2,242,900	283000	0.10	12.62
Mizoram	2,108,100	361000	0.33	17.12
Nagaland	1,657,900	123000	0.06	7.42
Sikkim	709,600	77000	0.13	10.85
Tripura	1,048,600	280000	0.08	26.70
NER	26,217,900	1,178,000	0.03	14.49

Source: *Basic Statistics of NER, 2015*

Table 6.6 shows that contrary to common belief, as far as agriculture land is concerned, the region does not enjoy special advantage as compared to the rest of India. The per capita net sown area is low in all the state of North-East India in spite of low population base. As far as percent of net sown area to total geographical is concerned, in some states like Arunachal Pradesh and Nagaland, it is as low as 2.53 percent and 7.42 percent respectively. On the whole, the region's net sown area constitutes only 14.49 percent of its geographical area which is much lower than the national average.

**(b) Mineral Resources:** The North Eastern Region is rich in mineral resources. The most important resources are crude oil and natural gas. If properly utilized, these resources may prove the path of rapid industrialization in the region. Coal, limestone, chromites etc. also offer good scope for mineral based industrialization of the region. Table 1.7 provides the availability of major minerals of the different states of North East India in terms of quantity and approximate money value.

**Table – 6.7**  
**Production of Minerals and Ores in NER 2011-12**

State	All Mineral Value	Fuel							Non-Metallic Minerals		
		Coal		Natural Gas		Petroleum (Crude)		Total Value	Limestone		Minor Mineral value (rupees)
		Quantity (000, tonnes)	Value (rupees)	Quantity	Value (rupees)	Quantity (000, tonnes)	Value (rupees)		Quantity (000, tonnes)	Value (rupees)	
Arunachal Pradesh	3874605	221	1464100	40	256040	118	2154465	3874605	0	0	201
Assam	114390160	602	3988000	2905	18594905	5025	91747355	114330260	242	59900	1523
Manipur	0	0	0	0	0	0	0	0	0	0	270986
Meghalaya	49172145	7206	47739800	0	0	0	0	47739800	3606	1427008	2866
Mizoram	0	0	0	0	0	0	0	0	0	0	72075
Nagaland	0	0	0	0	0	0	0	0	0	0	1711
Sikkim	0	0	0	0	0	0	0	0	0	0	1774
Tripura	4122244	0	0	644	4122244	0	0	4122244	0	0	18787
NER Total	171559154	8029	53191900	3589	22973189	5143	93901820	170066909	3848	1486908	10634

Source: Basic Statistics NER, 2015.

From table 6.7 it is found that in terms of production of mineral value, Assam tops the list (66.67 percent) followed by Meghalaya (28.67 percent). The rest belongs to Tripura and Arunachal Pradesh. The four states like Manipur, Mizoram, Nagaland and Sikkim do not

have much minerals for economic use. However the region as a whole is rich in mineral resources. Hence, attempts may be made to examine the economic feasibility for their exploitation. In fact, an integrated approach is necessary for long term sustainability, keeping in view the diverse needs of socio-economic activities and environmental preservation.

(c) **Water:** The North Eastern Region of India is very rich in terms of many rivers, streams, floodplain wetlands etc. The rivers Brahmaputra and Barak form the principal drainage of the region with its numerous tributaries flowing through the different states. In fact, the region consists of only 7.9 percent of total geographical area of the country but it contains 9.58 percent of rivers and canals, and 19.42 percent of floodplain lakes etc. The large river systems in the region along with structure of land forms provides ideal condition for generation of hydro power. The status of major hydro power development in the region is furnished in table 1.8.

**Table 6.8**  
**Status of Hydro Electric Potential Development in North Eastern Region, 2019**

	Region/ States	Identified Capacity MW	Capacity in Operation (percentage)	Capacity under Construction (percentage)	Capacity yet to be Taken up under Construction (percentage)
1	Arunachal Pradesh	50328	1.03	5.19	93.78
2	Assam	680	53.85	0	46.15
3	Manipur	1784	5.96	0	94.04
4	Meghalaya	2394	14.01	0	85.99
5	Mizoram	2196	2.82	0	97.18
6	Nagaland	1574	5.17	0	94.83
7	Tripura	15	0	0	0
	Sub Total (NER)	58971	2.45	4.46	93.1
	All INDIA	148701	27.95	7.45	64.6

Source: Ministry of Power, Government of India, 2019

Table 6.8 shows that North Eastern Region has around 40 percent identified hydro power generator capacity of India and among the states of North East India; Arunachal Pradesh has the highest potential i.e. around 85 percent of the region's identified capacity. However as far the utilization of hydro power is concerned, the region is able to use only 2.45 percent of identified capacity and 4.46 percent is under construction. Assam is the only state which is able to use more than 50 percent of its identified capacity. On the other hand Arunachal Pradesh has the highest potentials but it is able to use only 1.03 percent of identified capacity.

**Forests:** Forests are the most important natural resource of the region and they play an important role in the economic life of the indigenous people of the hilly areas of the region. For example, the region consists of around 7.9 percent of total area of the country but it contains around 25 percent of total forests in India. The coverage of forest area in the region as per data based on satellite imagery is given in table 1.9.

**Table 6.9**  
**Coverage of Actual Forest Area of the North-Eastern Region, 2015 (In Percentage)**

State	Dense Forest	Open Forest	Total
Arunachal Pradesh	77.17	22.83	79.96
Assam	46.21	53.78	35.83
Manipur	42.76	57.24	77.69
Meghalaya	57.38	42.62	76.45
Mizoram	32.95	67.05	86.27
Nagaland	46.73	53.03	75.33
Sikkim	79.43	20.52	47.13
Tripura	76.39	23.61	73.68
NER	59.74	40.26	65.34

*Source: Basic Statistics of NER, 2015*

Table 6.9 shows that around 65.34 percent of total geographical area of the region is covered under forests. Among the constituent States, Mizoram (86.27 percent) has the highest coverage followed by Arunachal Pradesh (79.96 percent). On the other hand, Assam has 35.84 percent of its geographical area under forests.

If we take its account only dense forests of good commercial value and ecological importance, it is only Arunachal Pradesh which can boast of really rich forest resources having 77.17 percent of the total forests is under dense forests. In other States, major part of the forest areas belong to the ordinary category consisting of degraded forests. The fact is that a significant forest area in hilly states being degenerated implies that on the one hand these are not available for settled agriculture and on the other hand, they do not yield much income or flow of economic benefits to the region.

### **1.8. Status of Human Development in North East India**

The concept of development has been changing over a period of time. The link between economic growth and development was a subject of global discussion during second half of 20<sup>th</sup> century. By the early 1960s, economic growth has emerged as the goal as well as indicator of progress in many countries. The process of development as the World Bank defines aims at raising the income and average material well being of the people of a country.



The concept of human development has evolved from the development debate in the 1970s and 1980s. The increasing visibility and growing popularity of the concept of human development has created an entirely new paradigm of public policy making particularly in developing countries. Human development is not just another dimension of development, it is altogether a new perspective and a revolutionary way to recast own conventional approach to development. What is 'new' in this approach to development is that the focus is on human beings and not just on the economy. Thus, Human development model enacts a radical shift of focus from the basket of the goods and services approach to human beings and their choice sets, their freedoms and especially in shaping their capability and well being (UNDP, 1990). Thus, the human development index (HDI) is basically a composite index based on three dimensions of human development i.e. income health and education and the HDI puts equal emphasis on all the three dimensions of development.

With this background an attempt was made to examine the status of human development of North Eastern States in India over a time period of around two decades. This is furnished in table 1.10.

**Table 6.10**  
**HDI of North Eastern States and India in 2000 and 2017**

State/ Country	HDI 2000			HDI 2017		
	Value	Rank in India	Rank in North-East	Value	Rank in India	Rank in North-East
Arunachal Pradesh	0.561	17	5	0.658	24	5
Assam	0.453	23	8	0.605	30	8
Manipur	0.525	10	3	0.695	15	3
Meghalaya	0.470	19	7	0.650	26	7
Mizoram	0.532	8	2	0.697	14	2
Nagaland	0.524	14	4	0.676	20	4
Sikkim	0.515	5	1	0.716	10	1
Tripura	0.532	18	6	0.655	25	6
India	0.493	130	-	0.640	131	-

*Source:* National Human Development Index, 2001 and 2018.

Table 6.10 reflects that there are wide variations of HDI among the states of North East India. For example, in 2000 there are three states like Sikkim, Mizoram and Manipur which were within top ten ranked states of India in terms of HDI. This is basically due to high per capita income and high literary rate of these three states. At the same time there are three states like Assam, Tripura and Arunachal Pradesh which are in the bottom segment. After a gap of 17 years, i.e. 2017, it was found that there is no doubt of improvement of absolute value of HDI of all the states of North East but their relative ranks among the states of India has fallen sharply. For example, in 2017, there is only one state i.e. Sikkim which is among the top ten

ranked states of India. In facts, Sikkim is able to keep its position because of steady rise in per capita income and significant improvement of social sector. On the other hand most of the states of North East are in bottom segment in 2017. For example, five of the states of North East like Nagaland, Arunachal Pradesh, Tripura, Meghalaya and Assam were ranked 20 and above among 29 states of India while the other two Manipur and Mizoram were in range of 14 to 19 category. The most important thing to observe is that the rank of all states of North East India in human development attainment deteriorated hugely between 2000 and 2017, obviously deteriorating HDI suggests falling social sector outcomes in relative terms.

Let us have a bird's eye view of status of human development in Arunachal Pradesh and its districts. The Department of Economics of Rajiv Gandhi University (formally Arunachal University) prepared the first Human Development Report of the state in collaboration with UNDP and State Government which was published in 2005. The report was based on large scale primary survey in all the districts of the state in order to estimate life expectancy and human poverty. The HDI in Arunachal Pradesh for 2001 was estimated to be 0.515. Of the three indices of HDI, the value of education index was 0.566, the health index was 0.484 and the income index had a value of 0.495. However, the districts of Arunachal Pradesh showed a significant variation in level of HDI. The details are furnished in table 6.11.

**Table – 6.11**  
**The Human Development Index for Arunachal and its districts, 2001**

Districts/States	HDI Value	HDI Rank
Tawang	0.555	6
West Kameng	0.573	3
East Kameng	0.362	13
Papumpare	0.573	3
Lower Subansiri	0.425	11
Upper Subansiri	0.438	10
West Siang	0.558	5
East Siang	0.66	1
Upper Siang	0.524	7
Dibang Valley	0.659	2
Lohit	0.518	8
Changlang	0.452	9
Tirap	0.397	12
Arunachal Pradesh	515	-

Source: Arunachal Pradesh HDR 2005

Table 6.11 reflects that East Siang district had the first rank with an HDI 0.660. Dibang Valley was ranked second with an HDI value of 0.659. Papumpare, the district in which the state capital located was the third place together with West Kameng. On the other hand East Kameng and Tirap districts were at the bottom as per Human Development Report of Arunachal Pradesh, 2005.

## 1.9: Summary

Our analysis reflects a few points which are as follows:

- North East India is a heterogeneous in terms of physical features, ethnic composition, literacy rate, urbanization rate and other demographic features as well as stages of economic development yet the North Eastern states are an inter-dependant economic system.
- The region has a few unique feature like rapid transition of the traditional economies to an integrated market system but with imperfections in factor market.
- In terms of relative economic performance, the North Eastern region is lagging for behind of national economy particularly after economic liberalization. However there are wide variations among the different states of North East India.
- Arunachal economy performed very efficiently in terms of growth of NSDP and per capita NSDP during seventies and eighties. However, the situation was different during nineties.
- With rise in per capita income of Arunachal Pradesh, there is rapid structural transformation of the economy. The services sector in Arunachal Pradesh has come to occupy a predominant position in State's income, a position that is much higher than agriculture, the traditional occupation of the people.
- The North Eastern region is rich in natural resources like land, mineral, water, as well as forests but these resources are not properly used for the economic development of the region.
- The picture of development does not only have brightness, but there are some dark patches as well. For example, most of the states in North East India are ranked low and very low in terms of human development index. What is more important is that their ranks deteriorated over time period 2000-2017.

### 1.10 Key Words:

- **Gross Domestic Product:** The value of final goods and services produced in an economy during a period of time. The economy may relate to a country or a state or a district etc. The period is normally one year.
- **Net Domestic Product (NDP):** When depreciation of capital is deducted from GDP, we have NDP.
- **Gross National Product:** GDP plus net factor income from abroad.
- **Net National Product:** GDP minus depreciation of capital
- **Per capita Income:** NNP divided by population.
- **Structural Transformation of an economy:** This is the changes in the sectoral composition of incomes labour force etc.
- **Shifting cultivation:** It is also known as by other names like swidden or slash and burn cultivation or jhuming or jhum cultivation. This agricultural practice uses the land extensively.

### 1.11: Check Your Progress / Questions

#### I. Short Questions

- i. What are the three broad sectors of an economy?
- ii. Why is service sector more important in Arunachal Pradesh?
- iii. How did the process of development begin in North East India?
- iv. What are the three important features of North East economy?
- v. What are the important renewable natural resources of North East India?
- vi. What do you mean by human development?

#### II Long Questions

- i. Describe an overview of North East economy.
- ii. Discuss the basic features of North East economy.
- iii. Explain the relative economic performance of North Eastern Region and its constituent States.
- iv. Describe the level and growth of NSDP and per capita NSDP of Arunachal Pradesh for three decades.
- v. Discuss changing sectoral contribution to state income and sectoral contribution to growth of income of Arunachal Pradesh.
- vi. Describe briefly the natural resource base of North East India.

- vii. Explain the status of human development in North East India and Arunachal Pradesh.

### **1.12: Suggested Readings**

- i. Baruah, Alokesh (ed), *India's North East Development Issues in a Historical Perspective*, Manahor Publish, New Delhi, 2005.
- ii. Banarjee Amalesh et. al (eds), *Economic Planning and Development of North Eastern States*, Kanishka Publishers, New Delhi, 1999.
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- iv. Government of India, *Arunachal Pradesh Development Report*, 2009.
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- vi. Roy, N.C. and P.K. Kuri, *Land Reform in Arunachal Pradesh*, Classical Publishing Company, 2001.
- vii. Sarma Atul, *String of Thoughts on North East India, An Economist's Perspective*, Aakar Book, New Delhi, 2018.

## UNIT-II

### AGRICULTURE IN NORTHEAST INDIA

#### Structure

- 2.0 Introductions
- 2.1 Objectives
- 2.2 Agricultural Practice in the region: Permanent cultivation, shifting cultivation and its effects, jhum cultivation and the problem of induction of new technology.
- 2.3 Land Tenure and Problem of Agricultural credit
- 2.4 Land Use Pattern and Cropping Pattern in Northeast India
  - 2.4.1 Land Use Pattern in Northeast India
  - 2.4.2 Cropping Pattern in Northeast India
- 2.5 Need for land reform with reference to Arunachal Pradesh
- 2.6 Agricultural Productivity in Northeast India
  - 2.6.1 Causes of Agricultural Low Productivity in Northeast India.
- 2.7 Further Readings

#### 2.0 INTRODUCTION

Agriculture in India is considered to be the backbone of the country and also regarded as the largest sector of the country's economic activity. It is the major sector of the State economy, in which the majority of people earn their livelihood. Though the share of agriculture in the aggregate economy has declined rapidly during the planned development of the country, it assumes a pivotal role in the rural economy. The contributory share of agriculture in GDP has declined from 53.1 per cent in 1950-51 to 13.1 per cent in 2011-12<sup>AE</sup> (Economic Survey 2012-13).

#### 2.1 Objectives

- ❖ Know about the agriculture situation in Northeast India
- ❖ The Extent of Jhum Cultivation and its effects
- ❖ Land Tenure, Land Use Pattern and Cropping Pattern in Northeast India
- ❖ Land Reform in Arunachal Pradesh
- ❖ Agricultural Productivity and the causes of low productivity

## **2.2 Agricultural Practice in the region: Permanent cultivation, shifting cultivation and its effects, jhum cultivation and the problem of induction of new technology.**

The Northeast India comprises of eight states namely Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Nagaland, Sikkim and Tripura with a total geographical area of 262180 km<sup>2</sup> which is about 8% of the country's total area. It lies between 21.5°N to 29.5° N latitude and 85.5° E to 97.5° E longitude and the majority of the population in the region is predominantly tribal, which mainly dependent on agriculture and land-based activities. Agriculture and allied sector is the major source of livelihood for the majority of the workforce (around 50-70% across the states). The region is characterized with diversified agro-climatic condition, different soil types, and irregular physical features and the region is also lagging behind in development. The agricultural practices of North East India are of two types- (i) Shifting cultivation, and (ii) Settled or plains agriculture. Rice and maize are the leading crops in both hilly regions and plain areas of the region. The modern agricultural inputs which are used in agriculture are comparatively low.

The region is endowed with a varied topography and agro-climatic conditions which offer vast potential for agriculture, horticulture and forestry. However, the region is lagging in agricultural development contrary to the mainland India. The main reasons behind the low level of agriculture development in the region is lack of appropriate strategies for the development of natural resources, inadequate infrastructure facilities and low adoption of improved technology.

### **2.2.1. Shifting Cultivation and its effects, Jhum Cultivation and the problem of induction of new technology**

The shifting cultivation commonly known as Jhumming which is one of the most ancient systems of farming and it is also known as Slash and Burn method of cultivation. On the basis of archaeological evidence and radio-carbon dating, the origin of shifting cultivation could be traced back to about 8000 BC in the Neolithic period which witnessed the remarkable and revolutionary change in man's mode of production of food as from hunter and gatherer he became food producer. Earlier cultivators used fire-stone, axes and hoes, while farmers in the present-day used digging sticks, iron tools, iron digging sticks, daon, hoe and knives. In the tropical rain forest of Central Africa, Central America and Southeast Asia, the shifting cultivation is the primitive form of soil utilization.

Shifting cultivation is known by different names in different parts of the world. It is generally known as 'slash and burn' and 'bush fallow' agriculture. It is termed as Ladcmg in Indonesia, Caingin in Philippines, Milpa in Central America and Mexico, Ray in Vietnam, Conuco in Venezuela, Roca in Brazil, Masole in the Congo and Central Africa. It is also practiced in the highlands of Manchuria, Korea and southwest China. In the hilly states of Northeast India it is commonly known as Jhum Cultivation. In mainland India, it is know by various names such as Podu, Dabi, Koman or Bringa in Orissa, as Kumari in Western Ghats, as Watra in southeast Rajasthan, as Penda, Bewar or Dahia and Deppa or Kumari in the Bastar district of Madhya Pradesh.

Shifting cultivation has been characterized as rotation of fields rather than rotation of crops, absence of draught animals and manuring, use of human labour only, employment of dibble stick or hoe, and short period of occupancy alternating with long fallow periods. When the natural fertility of land get exhausted after two or three years the fields are abandoned, the cultivators shift to another clearing, leaving the old one for natural recuperation. Thus such practice is known as 'shifting cultivation'.

### **2.2.2 Steps involve in process of jhum cultivation**

- a) Selection of the forested hilly land
- b) Clearing the forest tract by cutting down the jungle and burning the dried forest wood into ashes
- c) Worship and sacrifice
- e) Dibbling and sowing seeds
- f) Weeding and protection of crops
- g) Harvesting and thrashing
- h) Merry making and feasts
- i) Fallowing

The usual process demands the selection of a plot on or near the hill side or jungle. The selection of land is made in the months of December and January. The fertility of the soil is judged by the color and texture of the soil. In some tribes, community as a whole is collectively responsible for the clearing of the selected piece of land while in others the cutting of trees and shrubs is made by the respective family to whom the land has been allotted. The area allotted per family varies between half hectare to one hectare among the different tribes, regions and states. The land is cleared of all its undergrowth and the branches of trees are lopped off. The cleared growth is allowed to dry on the field. This process of



clearing which takes over a month is labour intensive, which are being undertaken with indigenous and primitive equipment's.

The dried growths, as well as the trees standing in the clearance, are set on fire. The cultivators take care that the fire should not spread into the forest. After the burning is complete, the un-burnt or partly burnt rubbish are collected in one place for the complete burning. The fire kills the weeds, grasses and insects. Then, the ashes are scattered over the ground and dibbling of seeds begin in March before the advent of pre-monsoon rain. Before sowing starts, evil spirits are worshipped and sacrifices are made for a good crop and prosperity to the family. The seeds are sown either by broadcast or dibbling. The dibbling and planting of seeds is an exclusive job of the female members. The male members broadcast seeds of crops like millets and small millets, whereas crops like maize, pulses, sesamum and vegetables are dibbled by females. While dibbling the seeds, the woman walk over the field with a digging stick or bill-hook in hand, make a hole in the ground, sow a few seeds and cover it over with earth by pressing it down with her toe.

At the advent of rains, the seeds begin to sprout. Thus, the soil is never ploughed and no artificial irrigation is made. After sowing the crop, farmer pays cursory attention to the crop and to remove weeds from the field. The crop is, however, protected from stray cattle and wild animals by fencing the fields with bamboo. Many Jhumias construct a hut in the field to look after the crop properly.

### **2.2.3 Jhum Cycle:**

The jhum cycle is influenced by the pressure of population, nature and density of forests, terrain, angle of slope, texture of soil and the average annual rainfall. Areas of sparse population generally have longer jhum cycle (15-25 years), while areas with high density of population have shorter jhum cycle (5-10 years). The patches of land for shifting cultivation are not selected in any given order or sequence. There is always a room for choice. The period of consecutive cropping and fallowing differs from region to region and from tribe to tribe. But over the period of time, with the increase in population the jhum cycle became shorter and shorter. In brief, in the earlier decades, the period before which the Jhumias returned to cultivate the same plot was quite long. This was partly due to the limited population and partly to the better fertility of soil which used to be rested for nearly thirty to forty years.

## 2.2.4 Extent of Jhum Cultivation in Northeast India

Table 7.1 shows the extent of jhum cultivation in the states of Northeast India. The annual area under shifting cultivation is highest in Manipur (90,000) hectare followed by Arunachal Pradesh (70,000) hectare. Nagaland has lowest area annually under the shifting cultivation as shown in the table. Whereas the State of Assam, Mizoram and Meghalaya have 69,600 hectare, 63,000 hectare and 53,000 hectares of area annually brought into shifting cultivation respectively. Over the period of time due to pressure of population on land fellow period of shifting cultivation also reduced to great extent in the region.

**Table 7.1**  
**Status of Jhum Cultivation in Northeast Region**

States	Annual Area under Shifting Cultivation (Ha)	Fallow Period (Years)	Minimum Area Under Jhum at a given time ('000 Ha)	No. of Jhumia Families ('000)	Jhum Land/ Family
1	2	3	4	5	6
Arunachal Pradesh	70,000	3-10	210	54	1.29
Assam	69,600	2-10	139	58	1.20
Manipur	90,000	4-7	360	70	1.29
Meghalaya	53,000	5-7	265	52	1.01
Mizoram	63,000	3-4	189	50	1.26
Nagaland	19,000	5-8	191	116	0.16
Sikkim	NA	NA	NA	NA	NA
Tripura	22,300	5-9	112	43	0.51

Source: Basic Statistics of Northeast Region, 2015

## 2.2.5 Shifting Cultivation: Problems and Prospects:

Clearing of jungles is the prerequisite of shifting cultivation. The felling of trees and clearing of bushes, however, accelerate soil erosion and accentuate variability of rainfall which may lead either to droughts or floods which overall have impact in decline of soil fertility. The ecosystems thus lose their resilience characteristics. The population dependent on shifting cultivation faces the shortage of food, fuel wood and fodder. Consequently, the nutritional standard goes down. As the cycle of shifting cultivation becomes shorter, the humus of soil declines and the biodiversity is considerably affected.

There are divergent opinions about the evil and adverse effects of shifting cultivation on the ecology and environment of the region. Many of them hold the view that it is primitive and depletes the forest, water and soil resources. Since jhuming damages the ecosystems and

should be stopped completely. According to the opposite views, supporting the continuance of shifting cultivation with necessary and effective reforms, it does little damage to soil erosion as the high humidity and heavy rainfall in the region do not permit the soil to remain uncovered for long. Some form of vegetation immediately covers the top soil which checks the soil erosion.

During the agricultural operations also, as no ploughing, hoeing and pulverization of soil is done, the soil remains compact. Moreover, jhuming lands are on steep slopes on which sedentary cultivation cannot be developed easily. In fact, jhuming is a way of life, evolved as a reflex to the physiographical character of land under special ecosystems. It is practiced for livelihood and not without the knowledge of its adverse effects. Assessing the fact that jhuming system cannot be stopped altogether, it is necessary to make the process more productive so that it may sustain the growing pressure of Jhumias population at a reasonably good standard of nutrition. For a change in jhuming typology it is essential that the Jhumia is provided with land where they can cultivate and derive profits permanently.

Once the retrain ability of soil is ensured, then the question of augmenting the soil fertility through the addition of manures and fertilizers could be meaningful. Measures should be taken to see that Jhumias are trained in other types of occupations. They should be given training in raising trees, orchards and plant protection, cottage and small industries, and indigenous handicrafts. Moreover, they should be trained in the development of dairying, piggery, sheep-rearing, poultry, duck-keeping, fisheries, beekeeping, agriculture, etc. New crops of economic importance have to be developed and their diffusion should be extended in the isolated hilly areas. In fact, a cropping pattern with higher inputs will enable greater yields to be obtained per unit area and that will help in detaching the Jhumias from the uncertain way of life of shifting cultivation.

The main approach to overcome the evil of shifting cultivation should be to change the jhuming lands into sedentary farms. In the hilly areas, one of the most common measures that have been adopted in many small tracts with success is the construction and development of terraces. The different types of terraces can be adopted to fit in with a particular type of ecosystem. These terraces have a definite advantage towards achieving sedentary farming in the areas of shifting cultivation. It has been accepted by most of the planners that terracing has to play a major role if agricultural land use in the hilly tracts is to be made more efficient. There are, however, many techno economic problems in the development of terraces. Terracing, apart from being a costly measure, requires adequate irrigation facilities which in

the mountainous areas cannot be provided easily. It, therefore, may not be feasible to go for large scale terracing. The human energy input used in the jhuming, however, can be used for the development of small terraced farms. In several tracts on the northeastern hill region, terraces have been developed with the help of local human energy input involving very little direct monetary input.

Shifting cultivation is one of the greatest threats to the biodiversity of our planet, destroying about 10 million hectares of tropical forests annually. Nevertheless, it supplies farming families with food, firewood, medicines and other domestic needs, though it produces low yields of crops and has almost no potential beyond subsistence farming. Moreover, where population densities are low and forest areas vast, slash and burn practices are sustainable and harmonious with the environment. The long term objective should be to develop alternatives to shifting cultivation that are ecologically sound, economically feasible, and culturally acceptable.

The environmental degradation as a result of shifting cultivation may be checked substantially by:

- i) Developing practical and relevant guidelines for policies that encourage farmers to adopt technologies that are eco-friendly and environmentally sound;
- ii) Improve conditions for people living near the forests by diversifying land use and thereby increasing food production;
- iii) Protect biodiversity and ensure better use of genetic resources;
- iv) Increase soil productivity and reduce emission of greenhouse gases by capturing carbon in the soil. Intensification and modification of traditional systems—prolonged cropping cycles and decreased fallow periods—will lead to increased soil organic matter and plant biomass;
- v) Involve local people at all stages of decision making as well as in all research processes;
- vi) Amalgamate the most indigenous knowledge, and national and international experience and expertise;
- vii) Develop suitable strategies for agricultural marketing and subsidies;
- viii) Design biological barriers to prevent soil erosion and water runoff;
- ix) Develop tree, crop and pasture systems that cycle nutrients and enhance soil fertility, reducing the need for expensive inorganic fertilizers; and
- x) Evaluate policy option for reclamation of degraded lands.

### **2.3 Land Tenure and Problem of Agricultural credit**

Northeastern region is inhabited mostly by the tribal population, the land tenure system in the hills of northeast is much different from that of the plains part of India. Also in the plains of the North East individual rights over land holding are transferable and buying and selling of such rights are ordinarily unrestricted. However in the hill areas individual rights over land is yet to take the form of full property rights in the sense that transfer of these rights is subject to restrictions. Non-transferability of land holding rights renders land unsuitable as collateral for the purpose of securing institutional credit to land holders.

Whereas, the plains parts of the northeast region are by and large free from these problem. This leaves out the Brahmaputra and the Barak Valleys of Assam (80% of the geographical area of Assam), the Imphal Valley of Manipur (10% of geographical area) and the plain areas of Tripura (40% of geographical area). The plains as usual are much more thickly populated than the hills and accommodate about 70% of the population of the region. Nonetheless the parts of the region comprised of the states of Arunachal Pradesh, Nagaland, Mizoram and Meghalaya, and the hill districts of Assam, Manipur and Tripura still accounts for a significant part of the economy of the region in which penetration of bank credit is hindered by non-establishment of transferable property rights on land.

Agriculture in the plains of northeast region is settled. As the land revenue being an important source of income for the government, land had been surveyed, titles had been giving ownership to individuals or institutions, and land holders were given title documents from the governments. Holding rights conferred in this manner are by and large heritable and transferable, and hence these rights are of the nature of full property rights as in other parts of the country. Obviously such land tenure system does not constitute an institutional hurdle for delivery of bank credit backed up by land as collateral.

In contrast agriculture in the hills of northeast region, traditionally are shifting in nature. Such agricultural practice makes the population nomadic with no settlement of population in a fixed location. Land used to be communally held and the right to land used to be distributed to families according to customary norms by the village council or the village chief. Also the absence of land revenue did not necessitate cadastral survey and settlement of land ownership. In this context it is perhaps significant to note that the system of

administration established in the plains of the region under British colonial rule was not extended to the hills. The hills were classified as 'excluded' or 'partially excluded' areas and tribal communities living in such areas were allowed to continue with their traditional arrangements of self-governance. After independence sixth schedule is incorporated in the constitution in an attempt to integrate these areas while preserving the traditional institution of self-governance of tribal communities of the region. Meanwhile penetration of market forces, the practice of settled cultivation and also urbanization has induced settling down of hill tribal population in fixed locations. The process has been instrumental in emergence of individual holdings in hill areas. This development has, however, not been backed up with cadastral survey and land settlement which could have been followed up with giving documents conferring legal ownership rights over holdings. The evolution of land holding rights to full property rights has hence remained incomplete.

In those parts of the hills of the North East where individual holdings of land have emerged, transfer of the holding is possible and it takes place frequently but within the tribal population only. The details of the modalities of such transfers differ from state to state and also in some cases even within the state. The transfer by sale of individual holdings within a village can take place within members of the same tribe, and such transfers are recognised by the village community. In some cases, sale deeds on plain or stamped papers are executed by the transacting parties to record the transfer. But the process does not result in any formal record or documents conferring land holding rights. The Inter-tribal transfer of individual holdings of village land is generally not in practice, though such transfer of communally held land are known to be in practice. In towns, transfer of land holdings among individuals of even different tribes but of the same state is generally permissible. But transfer of land holding rights to non-tribal is prohibited by law in all the hill areas to prevent alienation of tribal land.

At present in the hills of northeast region there are two system of land tenure exist: (a) community ownership of land in areas where shifting cultivation is still practised and the households enjoy user rights to land allocated to them by traditional authority and (b) individual ownership of land which is transferable only within members of local tribal community. The first type of land tenure is not only problematic as far as use of land as collateral for advancing bank credit is concerned, but does not even create incentives for investment for land improvement and conservation of its long term use-value. And in the

second type, where individual holdings have emerged, problem in use of land as collateral for bank loan can yet arise because of absence of documents formally entitling individuals with ownership. Without such a document banks are reluctant to take land holding rights as collaterals for advancing credit.

## 2.4 Land Use Pattern and Cropping Pattern in Northeast India

### 2.4.1 Land Use Pattern in Northeast India

The land use pattern of northeast is shown in table 7.2, where the figure shows the different uses of land as percentage of total land utilization.

**Table 7.2**  
**Land Use Pattern in Northeast India during 2014-15**  
(As Percentage to total land utilization)

States	Forest	Not Available for Cultivation	Permanent Pastures and other grazing land	Land Under Misc.Trees crops and groves	Culturable wasteland	Fallow land other than current fallow	Current fallow	Net area sown
Arunachal Pradesh	93.0	0.9	0.2	0.5	0.9	0.9	0.5	3.1
Assam	23.6	31.4	2.1	2.8	1.8	1.1	1.1	36.0
Manipur	80.3	1.3	0.0	0.3	0.0	0.0	0.0	18.1
Meghalaya	42.2	10.7	0.0	7.4	17.4	6.9	2.7	12.8
Mizoram	77.7	3.7	0.5	2.0	0.3	6.2	2.3	7.1
Nagaland	52.2	5.8	0.0	5.6	4.1	6.0	3.0	23.2
Sikkim	76.0	2.3	0.0	0.9	0.9	1.1	1.6	17.4
Tripura	60.0	13.9	0.1	1.0	0.3	0.2	0.1	24.3
All India	23.3	14.3	3.3	1.0	4.1	3.6	4.9	45.5

Source: NEDfi Data Bank, 2019

The above table represents the land use pattern in Northeast India during the year 2014-15. From the table it can be seen that, Arunachal Pradesh has the highest land under forest coverage i.e. about 93 percent of the total land is covered by forest followed by Manipur (80.3 percent). 23.6 percent of the land in Assam is covered under forest which is equivalent to All India level (23.3 per cent). 31.4 per cent of the total land under Assam is not available for cultivation. Among all the Northeast Indian state Assam has highest lands that is not available for cultivation, in the year 2014-15 followed by Tripura and Meghalaya. In Assam the land under permanent pastures and other grazing land constitute 2.1 per cent of the total land. Whereas states like Manipur, Meghalaya, Nagaland and Sikkim have zero (refer to table) pastures and grazing lands. Meghalaya have 7.4 percent of the total land under misc.

trees, crops and groves. 17.4 percent of the total land under Meghalaya comes under wastelands. Other north east states have only margin of land under cultivable wastelands. The total lands covered under fallow and other than current fallow are greater than the land under current fallow in all the Northeast state except for Tripura. But at All India level, land coverage under current fallow (4.9 percent) is higher than land coverage under current Fallow (3.6 percent). 36 percent of the total land in Assam is used under net area sown, whereas in Arunachal Pradesh only 3 percent of the total land is covered by net area sown. Thus, from the above table it can be concluded that in Northeast Indian states the total lands are covered with forest except for Assam where only 23.6 percent of land is covered by forest.

#### **2.4.2 Cropping Pattern in Northeast India**

The table 7.3 represents the cropping pattern of North East Indian states. Cropping pattern means the proportion of area under various crops at a point of time. The figures are calculated as total area under various crops at given year divided by total cropped area. From the table it can be seen that all the states cultivate both food grains (rice, wheat, millets, pulses) and non food grain (oilseeds, fruits, vegetables, spices). As per the figures the cropping pattern in the state are dominated by foodgrains in 2012-13 (70% in Arunachal Pradesh, 66 percent in Assam, 56 percent in Tripura, 61 percent in Nagaland). With food grains rice has the highest gross cropped area in all the states where cropping pattern are dominated by foodgrains except in Sikkim where the maize constituted 29 percent of gross cropped area. Mizoram is the only state whose cropping pattern is dominated by non foodgrain; fruits crop constituting 50 percent (in 2013-14) of the gross cropped area. Among the foodgrains wheat has the lowest share in the cropping pattern in all the eight states with only marginal or zero shares in the gross cropped area which is comparatively lower than all India level which is 15 percent of the gross cropped area. At all India levels the foodgrains (54 percent) dominates the cropping pattern with rice having the highest share in gross cropped area followed by Wheat.



**Table: 7.3 Cropping pattern in Northeast India**

State /Year	Rice	Wheat	Maize	Millets	Vegetables	Oilseeds	Spices	Pulses	Fruit Crops
<b>ARUNACHAL PRADESH</b>									
2012-13	44.2	1.0	16.7	8.0	0.5	11.3	3.57	3.33	30.48
2013-14	44.6	1.0	15.9	7.7	0.5	11.1	3.44	3.28	30.10
2014-15	42.5	1.3	16.1	8.7	0.6	11.7	3.40	3.85	30.10
<b>ASSAM</b>									
2012-13	61.0	0.8	0.6	0.1	6.8	7.5	2.37	3.46	3.70
2013-14	59.7	0.8	0.6	0.1	6.9	7.4	2.27	3.66	3.53
2014-15	61.1	0.6	0.7	0.1	7.1	7.5	2.41	3.63	3.56
<b>MANIPUR</b>									
2012-13	39.7	0.8	6.3	0.0	7.0	14.3	3.39	9.81	16.81
2013-14	59.1	0.6	6.9	0.0	6.7	9.8	2.78	8.46	14.34
2014-15	58.6	0.6	6.8	0.0	7.7	9.6	2.73	8.41	14.52
<b>MEGHALAYA</b>									
2012-13	32.1	0.1	5.1	0.7	11.9	2.9	4.96	1.06	9.75
2013-14	32.0	0.1	5.3	0.8	12.7	4.0	5.10	0.85	10.29
2014-15	32.2	0.1	5.3	0.8	13.0	4.1	5.10	2.36	10.56
<b>MIZORAM</b>									
2012-13	12.6	0.0	5.2	0.0	33.9	1.8	19.37	2.67	42.83
2013-14	34.0	0.0	5.1	0.0	36.1	1.8	19.71	3.42	50.48
2014-15	25.5	0.0	3.9	0.0	30.4	1.4	16.07	2.90	41.57
<b>NAGALAND</b>									
2012-13	37.5	0.7	14.0	1.8	5.3	13.2	2.00	8.14	7.61
2013-14	38.0	0.6	13.8	1.7	7.7	13.0	1.96	7.58	8.11
2014-15	39.0	0.6	13.8	1.7	7.7	13.0	1.95	7.40	8.11
<b>SIKKIM*</b>									
2012-13	8.3	0.4	27.8	4.5	17.8	5.7	18.44	4.44	10.17
2013-14	7.6	0.2	27.2	2.0	17.8	5.4	21.81	4.29	10.90
2014-15	8.1	0.3	29.3	2.2	21.4	5.8	25.06	4.63	0.01
<b>TRIPURA</b>									
2012-13	53.7	0.1	0.8	0.0	9.5	1.0	1.20	1.79	12.68
2013-14	53.6	0.0	1.0	0.0	9.9	1.3	1.20	2.57	14.43
2014-15	53.3	0.0	0.9	0.0	10.1	1.8	1.18	2.42	14.86
<b>ALL INDIA</b>									
2012-13	22.0	15.4	4.5	0.4	0.2	13.6	1.58	11.97	na
2013-14	22.0	15.2	4.5	0.3	0.3	14.0	1.57	12.55	3.59
2014-15	22.2	15.9	4.6	0.3	0.3	12.9	1.67	11.87	3.08

Source: NEDfi Data Bank

## 2.5 Need for land reform with reference to Arunachal Pradesh

The term land reforms are reforms of institutional factors related to land. In order to raise the agricultural production and also increase the level of income and standard of living of the cultivators, institutional factors along with technical factors are playing an important role. These institutional factors include land tenure system, land holdings, farming structure, land

distribution, intermediaries etc. The term 'land reforms' has two different senses. In a narrow sense, land reforms are concerned with those reforms related to land ownership and land holdings. But in a broad sense, the term 'land reforms' is used to mean those measures of reforms necessary to raise agricultural productivity which include reforms relating to fixation of rent on land, abolition of intermediaries, credit and marketing arrangements etc. The land reform legislation was passed by the Government of India includes following measures:

1. Abolition of intermediaries.
2. Tenancy reforms to regulate fair rent and provide security to tenure.
3. Ceilings on holdings and distribution of surplus land among the landlords.
4. Consolidation of holdings and prevention of their further fragmentation and
5. Development of cooperative farming.

Northeast India being inhabited by tribal population and majority of population are engage in agriculture and allied activities as their primary occupation. The nature of agriculture in the hills of northeast are shifting cultivation and such agricultural practice make the population nomadic and no fixed location of agriculture field. Further in the hills of northeast land ownership pattern can be classified into two categories: a) community ownership and b) individual ownership. The community ownership of land generally belongs to community or tribes, where the land is distributed among the tribal families by the village chief or village head for agricultural purpose. On the other hand, individual ownership of land exists possessing some legal documents of land from the respective government after recognised by their own tribal community or institution. However, in recent times, the traditional landownership pattern in the tribal societies of the northeast region in general and Arunachal Pradesh in particular is undergoing rapid transformation. In Arunachal Pradesh (Land Settlement and Records) Act of 2000, residents of the state did not have land titles. The only document the indigenous population received to stake claim to a piece of land was a "land possession certificate" issued by the deputy commissioner of a district, subject to approval by the forest department and the village council. Actual ownership continued to rest with the state government. Keeping apart the government land, most of the land across Arunachal Pradesh was owned by communities and not individuals. Though people had Land Possession Certificates (LPCs), for the plots which belonged to them but the LPCs didn't give them ownership rights of the land. In the absence of the any formal documents regarding the land ownership make it difficult for the tribal population of the State to make any collateral agreement or mortgaged it for loans from banks or any other financial institution. Thus there need of land reform in Arunachal Pradesh so that the tribal population can enjoy

full benefit of land ownership and avail bank loans for the development of agriculture and other sectors of the State economy. In recent the Arunachal Pradesh Land Settlement and Records Amendment Bill, 2018, which confers ownership rights to indigenous tribal people including communities and clans possessing LPCs, was passed State assembly. The bill recognises ownership right of the citizens, particularly indigenous people of the state and provides them right to give their land on long-term lease up to 33 years, which is extendable to another 33 years making it to 66 years in total for big and small ventures.

## 2.6 Agricultural Productivity in Northeast India

The table 7.4 shows the agricultural productivity in terms of kilograms per hectare of the Northeast Indian states.

**Table: 7.4**  
**Trends in Agricultural Productivity of some major crops in Northeast India**

State /Year	Rice	Wheat	Maize	Millets	Oilseeds	Pulses
ARUNACHAL PRADESH						
2012-13	1032.41	1498.47	1436.04	1032.41	909	1122
2013-14	1049.78	1510.14	1467.04	1049.78	958	1155
2014-15	1038.46	1973.68	1562.50	1038.46	971	1263
2015-16	1002.18	1969.31	1541.52	1002.18	1040	1015
2016-17	5118.35	1969.31	1500.00	5118.35	1040	1011
2017-18	1020.00	1970	1520.52	1020	1040	1020
Assam						
2012-13	494.36	1303.92	897.05	494.36	610	598
2013-14	613.97	1292.43	898.12	613.97	613	695
2014-15	603.00	1216.49	3332.74	603.00	670	748
2015-16	673.58	1633.52	3070.42	673.58	694	757
2016-17	616.34	1343.91	2911.28	616.34	643	735
2017-18	584	1386	3132	584	638	748
Manipur						
2012-13	767.54	2500.00	2301.44		729	935
2013-14	871.89	2497.78	2246.45		840	937
2014-15	920.14	2601.85	2243.22		863	959
2015-16	949.76	2497.78	2303.89		847	963
2016-17	955.78	2497.78	2194.03		858	973
2017-18	951	2498	2343		870	965
Meghalaya						
2012-13	NA	1806.28	1554.02	767.54	695	1019
2013-14		1880.95	2199.67	871.89	1030	1126
2014-15		1909.09	2259.42	920.14	1071	1405
2015-16		1953.13	2284.12	949.76	1091	1442
2016-17		1913.04	2291.23	955.78	1051	1446
2017-18		1928	2293	951	1057	1439
Mizoram						
2012-13			1314.14		1078	1061
2013-14			1420.42		1146	1468
2014-15			1514.94		1117	1416

<b>2015-16</b>			1342.24		1112	1361
<b>2016-17</b>			1541.96		1140	1352
<b>2017-18</b>			1583.87		1113	1544
<b>Nagaland</b>						
<b>2012-13</b>	1120.05	1801.22	1960.83	1120.05	1047	1096
<b>2013-14</b>	1124.57	1823.33	1969.18	1124.57	1048	1124
<b>2014-15</b>	1122.12	1824.10	1975.30	1122.12	1048	1146
<b>2015-16</b>	1122.43	1830.77	1978.81	1122.43	1047	1150
<b>2016-17</b>	1109.67	1840.24	1979.99	1109.67	1050	1151
<b>2017-18</b>	1112.17	1836	1981.92	1112.17	1050	1159
<b>Sikkim</b>						
<b>2012-13</b>	969.42	1057.69	1700.03	969.42	863	915
<b>2013-14</b>	1003.38	1083.33	1723.77	1003.38	887	925
<b>2014-15</b>	1003.38	1076.92	1727.43	1003.38	891	925
<b>2015-16</b>	980.39	1093.75	1753.79	980.39	909	954
<b>2016-17</b>	1009.02	1078.13	1762.74	1009.02	918	961
<b>2017-18</b>	1031	1079	1767	1031	924	954
<b>Tripura</b>						
<b>2012-13</b>	0.00	2000.00	1294.77	0.00	506	705
<b>2013-14</b>	0.00	2000.00	1278.87	0.00	759	719
<b>2014-15</b>	0.00	2142.86	1303.10	0.00	793	718
<b>2015-16</b>	820.00	2236.26	1398.91	820.00	771	673
<b>2016-17</b>	801.14	2300.00	1394.60	801.14	814	952
<b>2017-18</b>	783	2031	1428.54	783	780	710
<b>All India</b>						
<b>2012-13</b>	577.72	3116.54	2566.49	577.72	1168	789
<b>2013-14</b>	630.09	3145.38	2675.80	630.09	1168	764
<b>2014-15</b>	654.47	2749.88	2631.64	654.47	1075	728
<b>2015-16</b>	601.51	3034.00	2562.69	601.51	968	655
<b>2016-17</b>	713.84	3199.92	2688.60	713.84	1195	786
<b>2017-18</b>	803.6	3368.21	3065.32	803.6	1284	853

Source: Nedfi Data Bank

Note: Figures shows the kgs/hectare

The productivity of rice and millets per hectare is same (in absolute numbers) for all the northeast states. The productivity of oilseeds is lower than other crops in Arunachal Pradesh. The average productivity of rice is highest in Arunachal Pradesh among the north east states. But the productivity of wheat is higher than the productivity of rice within the state. The productivity of crops in Assam is lower than that of Arunachal Pradesh Except for the production of maize in 2013-14 and 2014-15. Productivity of wheat per hectare is highest in Manipur and Tripura. The all India level of wheat productivity is higher than the Northeast states of India. The productivity of oilseeds is very low compared to other crops. Mizoram has the highest productivity of oilseeds and pulses among the north east states. The productivity of oilseeds and the pulses were recorded lowest in Assam. The productivity of

maize was higher in all India level than the north east states except Assam during the year 2014-15 and 2015-16.

### **2.6.1 Causes of Agricultural Low Productivity in Northeast India.**

The main causes of low agricultural productivity in northeast India can be discussed under following heads:

**Uneconomic and fragmented holdings:** The marginalization of farmers is a dominant factor adversely affecting household income. Over 60.27 per cent of the operational holdings are below 1.0 ha and 22.18 per cent of the holdings are in the farm size group 1-2 ha. Except Nagaland, in other North-East states, the size of operational holding is very small. Such small holdings are uneconomic and results in under-investment in agriculture leading to low input use and low production.

**Low adoption of improved technology:** The adoption of HYV seeds in case of rice and other food crops in the northeast region is very low and also varies from region to region. The main causes of slow growth of HYV area are the non-availability of suitable seeds, predominance of traditional seeds in hill areas under Jhum cultivation, short supply of recommended seeds and defective distribution system. The fertilizer consumption is also low and variable. There are number of factors limiting the expansion of fertilizer use such as defective distribution system, poor transport and communication system and inadequate institutional credit. On the other hand, irrigation is another crucial constraint to agricultural production, which, at present covers less than 10 per cent of the gross cropped area.

**Flood problem in the region:** Flood is a major natural disaster regularly causing inundation and damage of standing crops, delay transplanting of main rice crop (Sali), which results in low yield. Some studies found that about 3.0 lakh hectare of cropped area are annually affected by flood in Assam. The worst soil erosion affected districts are North Lakhimpur, Dhemaji, Darrang and so on.

### **Technological Constraints**

1. Lack of suitable high-yielding rice varieties for diverse upland situations, flood affected areas, moisture stress conditions, and hill areas

2. Alternative crops for escaping pre-monsoon showers to avoid the problem of pre-harvest sprouting of crop in flood, free period
3. Develop improved crop management practices for shifting cultivation
4. Improvement and standardization of production techniques of fruits and vegetable crops
5. Use of improved post harvest management including pest and disease management and processing techniques for the major cash crops and horticultural crops
6. Land and water management technique specifically for acid soils
7. Economic packages for integrated farming systems combining crop cultivation with livestock, fishery, etc.
8. Integrated livestock management system for increased livestock products as well as draught power. The facilities of storage, processing and marketing are particularly deficient for perishable commodities. The access to institutional credit facility to the farmers must be improved substantially.

### **Attitude towards Agriculture**

Agriculture is the most preferred activity of a large section of the population in the region, yet the method of cultivation is indigenous. In view of the rapid technology turn over, appropriate strategy for HRD is required to maximize farm income through adoption of cutting-edge modern technology. The farmers usually stick to old practices and the younger generation distracts, which makes agriculture an occupation of elderly people living in rural areas. To attract enterprising youths to take up farming as profitable occupation and to reverse the out-migration, innovative strategy such as commercialization of agriculture and adoption of improved methods must be promoted.

### **Socio-economic Constraints**

The North-East India has diverse ethnic groups and social systems bound with customs and traditions. These factors clearly differentiate the type of economic activities and the economic status of the population, which inhibit the adoption of modern methods. Carefully prioritized strategies for agricultural development of the region may become instrumental to break the deadlock.

## 2.7 Further Readings:

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**UNIT – III**  
**DEVELOPMENT OF SECONDARY AND TERTIARY SECTOR IN NORTHEAST**  
**INDIA**

**Structure**

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Present Status of Industries in Northeast Region
- 3.3 Industries in North Eastern Region
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  - 3.3.4 Mineral-based Industries
  - 3.3.5 Other Industries
- 3.4 Distribution of Micro, Small, Medium Enterprise in NER
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- 3.6 Infrastructure Development: Power, Transport, Communication
- 3.7 Market and Banking
  - 3.7.1 North Eastern Development Finance Corporation Ltd (NEDFi)
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**3.0 Introduction**

The term Industry refers mainly to the manufacturing activity. Industrialisation relates to the industrialization of manufacturing activity for increasing production in business enterprises. Industrialisation is a process of economic development where an increasing proportion of local resources are industrialized to establish a technically up-to-date and diversified economic processing. It implies, not merely development of certain industries, but certain basic changes in the structure, technology and industrialization of economic activity.

The North-East India has got its definite identity due to its peculiar physical, economic and socio-cultural characteristics. This region consists of eight states viz., Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, Sikkim. The NER of India covers an area of 2.62 lakh sq.km. It accounts for 7.9% of total geographical area of the country. With a total population of 46 million (2011), it accounts for 3.8% of total population



of India. There are differences among the eight States in the North Eastern region with respect to their resource endowments, level of industrialization as well as infrastructural facilities. The industrial sector has mainly grown around tea, petroleum (crude), natural gas etc. in Assam and mining, saw mills and steel fabrication units in other parts of the region. The full potential of the region is yet to be exploited and this has left the economy in a primarily agrarian state.

The North East Region has often been termed as industrially backward region of the country. Among the various reasons for its lack of connectivity, backwardness is the major form. The region also shares international borders with China, Tibet, Myanmar, Bangladesh, Nepal, and Bhutan, and is considered to be of vital geopolitical and economic importance. Bolstering the economic development and investment potential of the region is thus a key aspect of India's Act East policy, which focuses on improved socioeconomic, trade, and business engagement with East Asia and the ASEAN states.

### **3.1 Objectives**

- ❖ To know the status of MSME in Northeast India and the factor inhabiting the growth of these industries
- ❖ Infrastructure development in Northeast India
- ❖ Role of financial institution in the development of the NE region

### **3.2 Present Status of Industries in Northeast Region**

The Northeast Region is industrially underdeveloped despite the fact that the region is endowed with vast potential of natural resources in term of forest, hydro-electricity, bio-diversity, etc.,. The present contribution of the industries in respective State domestic product of NER can be explained with the help of table.

**Table 8.1**  
**Percentage Share of Industry in Gross Value added in current price 2016-17**

States	Mining and quarrying	Manufacturing	Electricity, gas, water supply & other utility services	Industry Total
Arunachal Pradesh	2.85	2.61	9.21	14.66
Assam	10.92	12.37	2.09	25.38
Manipur	NA	3.26	1.96	5.22
Meghalaya	6.08	7.78	1.93	15.79
Mizoram	0.99	0.69	13.66	15.34
Nagaland	0.96	1.39	1.98	4.33
Sikkim	0.10	40.56	13.67	54.33
Tripura	NA	NA	NA	NA
India	2.41	16.83	2.63	29.29

Source: NEDFi Data Bank

The table 8.1 shows that gross value added of industrial sector of Sikkim is more than 50 percent. Its manufacturing sector alone contribute around 40 percent. Since the state Sikkim is well connected with Siliguri (nearest railway station) and also known as chicken neck corridor which connect the entire northeast region to rest of India. In the State of Assam almost 25 percent of Gross value added to its domestic product come from industrial sector. The contribution of Industrial sector in Assam is all time high due to its extensive oil exploration and tea plantation industry. Since from the time of colonial rule Assam in the NER is industrially developed compared to the rest of the States. Over the period of time due Look East Policy and Act East Policy of the government, industrial sector in the other States of northeast is also getting boost especially hydro-electricity industry. On the other hand, both the state of Meghalaya and Mizoram, the industrial sector contribute around 15 percent to its respective domestic product. The figures of all India level shows that industry contribute around 30 percent to its GDP in 2016-17. The manufacturing unit contribute 16.83 percent, mining & quarrying (2.41) and electricity, gas, water supply & other utility services (2.63) percent respectively.

### **3.3 Industries in North Eastern Region**

Industrially, the states in the region hardly have any industrial base, except perhaps Assam, because of its traditional tea, oil and wood based industries. To some extent Meghalaya has made some headway in setting up of small and medium industries. In recent years the “Look East Policy” of Government of India has made North East more important and strategic. The region has to gear up to take up more challenges and capitalize on the opportunities thrown open by the huge market in the South East Asian Countries. The industries of this region can be broadly classified as under:

#### **3.3.1 Agro-based Industries**

Agriculture is the main occupation of the people of North Eastern Region. SSI units based on the agricultural products play a significant role in the economy of NER since the early stages of development. Most of the units are engaged in the manufacturing or processing of food products. Agro based products like paddy; ginger, chilly, orange, and maize, banana, passion fruits, mustard, turmeric, sugarcane and such other crops are grown intensively throughout the entire region. Rice mill, paddy dehusking, gur making, chow making, oil mill, spice grinding, small flour mill, pickle making, chips making, banana fibre extraction unit etc. are some of the important agro-based industries under the category of food products and allied industries.

#### **3.3.2 Forest-based Industries**

Nature has bestowed the NER with varieties of flora and fauna. The entire region is rich in forest and forest resources. Small scale and cottage industrial units based on the forest resources occupy a dominant place in the industrial sector of the economy. Different species of bamboo, varieties of timbers like teak, eucalyptus, rubber, pine, magnolia and oak, cane, medicinal plants and herbs, broom etc. are some of the important forest products of the region. Wood Products like furniture making, door and window making, automobile body building, saw mill, bamboo ply, mat ply, fibre board, decorative items like telephone stand etc., bamboo products like bamboo bags, hats, baskets, tooth picks, mats, cane furniture's,

carpentry works, citronella oil producing units etc. are some major forest-based SSI units in NER.

### **3.3.3 Textile-based Industries**

Since time immemorial, the tribal societies of NER were characterized by the use of colourful traditional dresses prepared by the local weavers. Handloom and weaving is a popular household industry among the tribal's. Handloom industry plays an important role for socio-economic development in the region in addition to safeguard the age old custom, tradition and culture. The modern textile industries have not been developed in this region; most of the traditional loom has been replaced by zo-loom and fly shuttle looms due to their higher working capacity. The use of improved power loom is very few in numbers among the hill people. Most of the looms are operated by hands. Some textile units such as readymade garments of cotton and wool, knitting and embroidery, tailoring etc. are there in the state. Most of the handlooms are specialized in the production of traditional dresses.

### **3.3.4 Mineral-based Industries**

Mineral-based industries of the north eastern region include railway workshops, engineering industry, and re-Rolling Mills, steelworks, motor-vehicle workshops, galvanised wire units, cycle factories, aluminium utensils industry, cycle spare parts, steel wire net, barbed wire, cement industry etc. Moreover, the non-metal based industries include petroleum oil industry and natural gas-based industry.

### **3.3.5 Other Industries**

It includes power generation industry, fertiliser industry, paper products printing press, chemical industry, metal industry, rubber & plastic based industries, leather industries etc.

## **3.4 Distribution of Micro, Small, Medium Enterprise in NER**

The table 8.2 shows the statewise distribution of MSME in the NER. The figures show that in NER, Assam has highest number of MSME which is around 12 lakhs unit followed by Tripura that is around 2 lakhs unit. It is to be noted that due to various bottleneck presence in

the region, numbers of micro enterprise are highest in the region. In the state of Assam alone around 12.10 lakhs of micro enterprise registered in the State. The household industry especially silk weaving industry is generally found in every household in Assam. It is also famous for production Eri and Muga silk in the region. The state of Tripura has also around 2 lakh micro enterprise followed by Manipur. On the other hand, rest of the NER has negligible amount of micro enterprise. In case of small and medium it is almost nill in the region. The figures of NER shows that around 18 lakhs of micro enterprise is registered.

**Table 8.2**  
**State-wise Distribution of MSME in Northeast Region**

State	Estimated number of enterprise (in Lakhs)			
	Micro	Small	Medium	MSME
Arunachal Pradesh	0.22	0.00	0.00	0.23
Assam	12.10	0.04	0.00	12.14
Manipur	1.80	0.00	0.00	1.80
Meghalaya	1.12	0.00	0.00	1.12
Mizoram	0.35	0.00	0.00	0.35
Nagaland	0.91	0.00	0.00	0.91
Sikkim	0.26	0.00	0.00	0.26
Tripura	2.10	0.01	0.00	2.11
NER	18.86	0.05	0.00	18.92
All India	630.52	3.31	0.05	633.88

Source: NEDFi Data Bank

### **3.5. Factors inhibiting the growth of Industries in North East**

1. **Inefficient Manpower:** Manpower plays an important role in any industry. The inefficiency of manpower in small- scale industries due to illiteracy, ignorance, lack of training facilities etc. affected the growth of small- scale industries.
2. **Lack of Credit Facility:** Another major problem of small- scale industries is the lack of credit facilities. Before nationalisation, commercial banks were not interested in providing finance to this sector. This situation has been changed after nationalisation of commercial banks but it is still far from satisfactory.
3. **Old and Obsolete Machineries:** The small- scale industries are facing the problem in production due to old and obsolete machineries. They are unable to compete with the products of large- scale industries.
4. **Lack of Marketing Facilities:** The small- scale industries also facing the problem of marketing their products. There is lack of organised marketing facilities for these industries. They have to depend on the middlemen for selling their products. In many cases the market

for their products remains untapped.

5. Old Designs: The small- scale industries are continuing with the age old designs. The products are unable to meet the modern demand.

6. Scattered Plantation & Uneven Distribution The most important challenge which affects the marketing of produces in the region is the scattered plantation and uneven distribution of products which is uneconomical and inefficient. This in particular resulted in distress sale of surplus product in the local market as it could not attract big buyers from outside.

7. Lack of road and transportation facility Another major challenge is the non-availability of proper transportation network, across the region covering urban, semi-urban and rural areas; which in particular affects the movement of produces from the region to other parts of the country. As a result, increase in transportation cost or damage of goods during transportation or both contributing to low economic return. Most seasonal crops produced in one area cannot be taken to other part of the region for marketing due to lack of proper logistic support & poor transportation facilities.

8. Lack of good marketing agencies and other distribution channel Lack of appropriate marketing agencies in the region till date, is one of most important factor due to which the supply chain for the sale of farm based produces gets affected. Normally, private traders and middlemen pre-dominate the market and trading of agricultural produce in the region.

### 3.6 Infrastructure Development: Power, Transport, Communication

**Table 8.3**  
**Status of Installed capacity (in MW) of Power in Northeast Region (As on 30.06.2019)**

States	Sources of Power				Total
	Thermal	Nuclear	Hydro	Res (MNRE)	
Assam	1196.79	0.00	457.08	60.98	1714.85
Arunachal Pradesh	83.87	0.00	116.55	136.50	336.92
Meghalaya	155.29	0.00	394.27	32.65	582.21
Tripura	662.55	0.00	68.49	25.42	756.46
Manipur	154.67	0.00	95.34	8.92	258.93
Nagaland	81.03	0.00	57.33	31.67	170.03
Mizoram	71.51	0.00	97.94	36.98	206.43
Total NER	2581.83	0.00	1427.00	333.12	4341.94

Source: [http://www.cea.nic.in/reports/monthly/installedcapacity/2019/installed\\_capacity-06.pdf](http://www.cea.nic.in/reports/monthly/installedcapacity/2019/installed_capacity-06.pdf)

Table 8.3 shows that highest installed capacity of power among the NE states found in Assam (1714.85 MW), followed by Tripura (756.46 MW) and Meghalaya (582.21 MW). Total install capacity of power in the whole NE states found 4341.94 MW in 2019 which is higher than the all the NE states. Though in India, there are four type of power installed capacity, but in the NE states we have found only three type sources where power are installed. These are Thermal, Hydro and Res (MNRE). Among these three, NE states highest depends on the Thermal power in case of power installation followed by Hydro and Res (MNRE). The highest installed capacity of thermal power found in Assam (1196.79 MW) followed by Tripura (662.55 MW) and Meghalaya (155.29 MW). In case of Hydro, Assam and Meghalaya has found the highest capacity to installed power. Regarding the Res (MNRE), Arunachal Pradesh (136.50 MW) has the highest capacity to installed power followed by Assam (60.98 MW).

**Table 8.4**  
**Total Length of Roads and Railways in Northeast region**

State	Roads (in Kms.)	Railways (in Kms.)
Arunachal Pradesh	30692	12
Assam	329520	2443
Manipur	24776	1
Meghalaya	21727	-
Mizoram	8108	2
Nagaland	36114	11
Sikkim	8243	-
Tripura	39365	193
NER	498545	2662
<b>All India</b>	<b>4703293</b>	<b>66687</b>

Source: NEDfi Data Bank

Table 8.4 shows the road infrastructure among the north-eastern states in India is not much satisfactory than the other parts of India. Except Assam, the length of road in the other NE states is comparatively very. The lowest length of the road is found in Mizoram (8108 kms) followed by Sikkim (8243 kms). On the other hand in case rail transport, out of the eight NE states two states still does not have any rail connectivity viz., Sikkim and Meghalaya. Out of the total length of the rail transport in NE states, majority of rail transport is found in Assam (2443 kms) and only 1 km rail transport is found in Manipur.

**Table 8.5**  
**Average Population and Average Area Served Per Post Office in the North Eastern Region as on**  
**31.03.2017**

State	No. of Post Offices	Average population served per Post Office (Persons)	Average area served per Post Office (In Sq. Kms)
Arunachal Pradesh	4012	7769	19.55
Assam	302	4579	277.28
Manipur	701	3882	31.85
Meghalaya	491	6043	45.66
Mizoram	389	2805	54.19
Nagaland	331	5980	50.09
Sikkim	711	6809	14.76
Tripura	209	2909	33.97

*Source: Department of Posts, Ministry of Communications, Gol*

Table 8.5 reveals that highest number of post office is found in Arunachal Pradesh (4012) followed by Sikkim (711) and Manipur (701). Tripura has found the lowest number of post office (209) followed by Assam (302). On the other hand, average population per post office served to be found highest in Arunachal Pradesh (7769 persons per post office) followed by Sikkim (6809 persons per post office) and only 2805 persons served per post office in Mizoram. However, in case of average area served by per post office (in Sq. km) is found to be highest in Assam (around 277 post offices) followed by Nagaland (around 34 post offices) and lowest is in Sikkim (around 15 post offices) and Arunachal Pradesh (around 20 post offices).



**Table 8.6**  
**State wise Wire line and Wireless connection in Northeast India as on 31<sup>st</sup> March 2016**

States	Wireline	Wireless	Total
Arunachal Pradesh	24092	957729	981821
Assam	160542	18532364	18692906
Manipur	21448	2569768	2591216
Meghalaya	19409	1902567	1921976
Mizoram	18358	1071387	1089745
Nagaland	13498	1720471	1733969
Sikkim	NA	585456	585456
Tripura	27524	2761750	2789274
All India	25224568	1034108663	1059333231

Source: NEDfi Data Bank

Table 8.6 shows that the wireless and wire line connection among the NE states. It is observed that the number of wireless connection in the NE states is comparatively high than the Wire line connection in the NE states. The highest connection (both wireless and wire line) is found in Assam followed by Tripura among the NE states and the lowest is found in Sikkim. In case of wireless connection, Assam is in top position followed by Tripura and Sikkim is in bottom. Similarly, Assam is found in Top position in case of wire line connection but Meghalaya is in bottom position.

**Table 8.7**  
**Tele-density in Northeastern States in various years**

Year	Northeast	All India
2010-11	44.26	70.89
2011-12	52.36	78.66
2012-13	52.92	73.32
2013-14	55.13	75.23
2014-15	60.88	79.36
2015-16	64.43	83.4

Source: NEDfi Data Bank

In case of teledensity in the NE states has been increased but it is comparatively very low than the all India level. Table 5 shows that in the year 2011-12, the teledensity in the NE states was 44.26 which is found to increase 64.43 in the year 2015-16. But, in all India level it was increased from 70.89 to 83.4 during the same time period.

## **3.7 Market and Banking**

### **3.7.1 North Eastern Development Finance Corporation Ltd. (NEDFi)**

The North Eastern Development Finance Corporation Ltd (NEDFi) is a Public Limited Company registered under the Companies Act 1956 on 9<sup>th</sup> August, 1995. It is notified as a Public Financial Institution under Section 4A of the said Act and was registered as an NBFC in 2002 with RBI. The shareholders of the Corporation are IDBI, SBI, LIC, SIDBI, ICICI, IFCI, SUUTI, GIC and its subsidiaries. The management of NEDFi has been entrusted upon the Board of Directors comprising representatives from shareholder institutions, DoNER, State Governments and eminent persons from the NE Region and outside having wide experience in industry, economics, finance and management.

In 1994, the I. K. Borthakur Committee Report conceptualized the formation of a North-Eastern Development Bank to cater to the needs of the region. Following the report, the then Finance Minister, Dr. Manmohan Singh, in his budget speech in March 1995 announced setting up of a development bank for the North Eastern States of India. At the time of its establishment, the corporation was placed under the Ministry of Finance, Banking Division for administrative purpose. However, with the formation of Ministry of Development of North Eastern Region (DoNER), Govt. of India in 2004, the Corporation has been placed under the Ministry of DoNER for administrative purpose.

NEDFi provides financial assistance to micro, small, medium and large enterprises for setting up industrial, infrastructure and agri-allied projects in the North Eastern Region of India and also Microfinance through MFI/NGOs. Besides financing, the Corporation offers Consultancy & Advisory services to the state Governments, private sectors and other agencies. It conduct sector or state specific studies under its Techno-Economic Development Fund (TEDF) and is the designated nodal agency for disbursement of Govt. of India incentives to the industries in the North-East India under North–East Industrial and Investment Promotion Policy 2007 (NEIIPP 2007). The promotional activities include mentoring through BFC, Water Hyacinth Craft, NEDFi Convention Center, NEDFi Pavillion etc.

NEDFi is the premier financial and development institution of the North East of India whose main objectives as per its Memorandum of Association are to carry on and transact the business of providing credit and other facilities for promotion, expansion and modernization

of industrial enterprises and infrastructure projects in the North Eastern Region of India, also carry on and transact business of providing credit and other facilities for promotion of agro-horticulture, medicinal and sericulture plantation, aquaculture, poultry, dairy and animal husbandry development in order to initiate large involvement of rural population in the economic upsurge of the society and faster economic growth of the region. NEDFi aims to be a dynamic and responsive organization to catalyze the economic growth of the North-East. It assists in the efficient formation of fixed assets by identifying, financing and nurturing eco-friendly and commercially viable projects in the region. It strives to achieve highest standard of quality in terms of services to the entrepreneurs by rendering in-depth counseling, timely advices and assistance for building quality enterprises on a sustained basis.

### **3.7.2 Small Industries Development Bank of India (SIDBI)**

The SIDBI (Small Industries Development Bank of India) is a wholly owned subsidiary of IDBI (Industrial Development Bank of India), established under the special Act of the Parliament 1988 which became operative from April 2, 1990. The role of Small Industries Development Bank of India (SIDBI), as the principal financial institution for the promotion, financing and development of industry in the small scale sector is mainly two fold; Financing and Developmental. In the sphere of financing, SIDBI operates a number of schemes tailored to meet the specific requirements of target groups and activities. While the financial assistance to small scale units is largely provided under refinance scheme operated through a large network of bands and State level financial institutions, SIDBI is extending direct assistance for development of other important areas like infrastructure, marketing organizations, supply of raw materials, ancillary development and technology upgradation.

### **3.7.3 Promotional & Developmental Activities**

SIDBI has put greater emphasis on the promotional and developmental (P&D) needs of the Micro Small and medium Enterprises (MSMEs) in NER for their capacity building and holistic development. It may be noted that the Committee on Financial Sector Plan for the North Eastern Region under Smt. Usha Thorat, Dy. Governor, RBI has made certain recommendations for SIDBI to implement its developmental programmes, viz. Cluster Development Programmes and Rural Industries Programme in all the States of North East.

SIDBI has geared up to deepen its support in the recommended areas. The support of the Bank under various promotional and developmental programmes in the NER, are as under:

**a) Rural Industries Programme:** The rural industries programme aims at creation of employment through enterprise promotion in rural and semi-urban areas and addressing problems such as rural unemployment, urban migration, under-utilisation of know-how and latent rural resources. Under the Bank's Flagship P&D Programme, viz. RIP, 22 districts in NER have so far been covered, out of which, 12 are currently under implementation.

**b) Entrepreneurship Development Programme:**

The Entrepreneurship Development Programme aims at promotion of self employed ventures. It also enables in order to generate employment opportunities, especially in far flung and rural areas targeting less privileged sections of the society like women and SC/ST. The EDPs are conducted in the cluster or for a heterogeneous group of entrepreneurs. The Bank has conducted around 288 EDPs benefiting around 13141 participants till June 30, 2011.

**c) Cluster Development Programme :** The Cluster Development Programmes is a comprehensive package of business development services, such as technology upgradation, capacity building, environment marketing, credit quality WTO, information dissemination etc.

**d) Skill-cum-technology Upgradation Programme:** Skill-cum-Technology Upgradation Programme is structured to improve the performance of existing MSME unit by developing/strengthen managerial skill and technical competence of the entrepreneur and senior executives of small enterprises. STUP also aims at creating awareness amongst the SME units on process improvements, technological developments etc. and inducing the units to upgrade their technological level. The Bank has so far conducted over 133 STUPs/Skill Development Programme benefiting over around 4192 participants in the entire NER as on June 30, 2011.

e) Strengthening SME Sector with a view to strengthening the SME sector, the Bank supports reputed management/technology institution for offering management development programmes.

**f) Marketing Initiatives:** As an important ingredient of its P&D initiatives, the Bank supports various marketing events with the intention of providing appropriate marketing linkages to the trainees of EDPs and RIP, etc.

### **Institution Building:**

- i) North Eastern Development Finance Corporation Ltd. (NEDFi)-SIDBI is one of the co-promoters of NEDFi which is set up at Guwahati as the Development Finance Corporation for the North East. SIDBI has contributed a sum of Rs.10 crore towards the paid-up capital of the agency. NEDFi aims at catalysing the economic development of the region by extending assistance for the efficient formation of fixed assets through identification, financing and nurturing of eco-friendly and commercially viable industrial and infrastructure projects in the Region.
- ii) **Indian Institution of Entrepreneurship (Iie), Guwahati-sidbi** is one of the founder member of IIE set up at Guwahati. An amount of Rs.25 lakh has been extended towards corpus fund for setting up the Institute. IIE is undertaking entrepreneurial training activities in the Region

### **Other Iniyatives**

- i) Assistance was sanction to North Eastern Industrial & Technical Consultancy Organisation Ltd (NEITCO) for preparation of 100 project profile to tiny sector projects for the North Eastern Region.
- ii) SIDBI in association with Exim Bank, also conducted a workshop on export oriented fruit processing Industry for for enterpreneours having fruit processing units in North Eastern Region.
- iii) The Bank has support various vocational training and marketing/seminars/exhibitions covering over 3500 participants from MSME sector in the NER.
- iv) Counseling centre for Micro and Small Enterprises was set up initially for a period of one year in FY 2010 jointly by SIDBI and United Bank of India for providing counseling services to potential enterpreneous .
- v) Project profile have been prepared for 100 micro sector projects having potential in North Eastern Region and was released by Shri P. Chindambram, Hon'ble Finance Minister Govt. of India in the presence of Hon'ble Prime Minister on Oct. 04, 2008.

### **3.7.4 Industrial Development Bank of India (IDBI)**

Industrial Development Bank of India (IDBI) established under Industrial Development Bank of India Act, 1964, is the principal financial institution for providing credit and other facilities for developing industries and assisting development institutions. Till 1976, IDBI was a subsidiary bank of RBI. In 1976 it was separated from RBI and the ownership was transferred to Government of India. IDBI is the tenth largest bank in the world in terms of development. The National Stock Exchange (NSE), the National Securities Depository Services Ltd. (NSDL), Stock Holding Corporation of India (SHCIL) are some of the Institutions which has been built by IDBI. IDBI consist of a Board of Directors, consisting of a chairman and Managing Director appointed by the Government of India, a Deputy Governor of the RBI nominated by that bank and 20 other Directors are nominated by the Central Government.

The board had constituted an Executive Committee consisting of 10 Directors, including the Chairman and Managing Director. The executive committee is empowered to sanction financial assistance. The Head office of IDBI is located in Mumbai. The bank has five regional offices, one each in Kolkata, Guwahati, New Delhi, Chennai and Mumbai. Besides the bank have 21 branch offices.

#### **Developmental Activities of IDBI:**

##### **(1) Promotional Activities:**

In fulfillment of its developmental role, the bank continues to perform a wide range of promotional activities relating to developmental programmes for new entrepreneurs, consultancy services for small and medium enterprises and programmes designed for accredited voluntary agencies for the economic upliftment of the underprivileged.

These include entrepreneurship development, self-employment and wage employment in the industrial sector for the weaker sections of society through voluntary agencies, support to Science and Technology Entrepreneurs' Parks, Energy Conservation, Common Quality Testing Centers for small industries.

##### **(2) Technical Consultancy Organisations:**

With a view to making available at a reasonable cost, consultancy and advisory services to entrepreneurs, particularly to new and small entrepreneurs, IDBI, in collaboration with other

All-India Financial Institutions, has set up a network of Technical Consultancy Organisations (TCOs) covering the entire country. TCOs offer diversified services to small and medium enterprises in the selection, formulation and appraisal of projects, their implementation and review.

### **(3) Entrepreneurship Development Institute:**

Realising that entrepreneurship development is the key to industrial development; IDBI played a prime role in setting up of the Entrepreneurship Development Institute of India for fostering entrepreneurship in the country. It has also established similar institutes in Bihar, Orissa, Madhya Pradesh and Uttar Pradesh. IDBI also extends financial support to various organisations in conducting studies or surveys of relevance to industrial development.

#### **The main functions of IDBI are discussed below:**

- (i) To provide financial assistance to industrial enterprises.
- (ii) To promote institutions engaged in industrial development.
- iii) To provide technical and administrative assistance for promotion management or expansion of industry.
- (iv) To undertake market and investment research and surveys in connection with development of industry.

#### **IDBI Assistance:**

**The IDBI provides financial assistance either directly or through some specified financial institutions:**

##### ***(i) Direct Assistance:***

The IDBI grants loans and advances to industrial concerns. There is no restriction on the upper or lower limits for assistance to any concern itself. The bank guarantees loans raised by industrial concerns in the open market from the State Co-operative Banks, the Scheduled Banks, the Industrial Finance Corporation of India (IFCI) and other 'notified' financial institutions.

##### ***(ii) Indirect Assistance:***

The IDBI can refinance term loans to industrial concerns repayable within 3 to 25 years given by the IFCI, the State Financial Corporation and some other financial institutions and to SIDCs (State Industrial Development Corporations), Commercial banks and Cooperative

banks which extend term loans not exceeding 10 years to industrial concerns. IDBI subscribes to the shares and bonds of the financial institutions and thereby provide supplementary resources.

### **3.8 Further Readings:**

1. Nayak P "Role of Financial Institutions in Promoting Entrepreneurship in Assam Small Scale Sector in Assam, "General Economics and Teaching 0509018, University Library of Munich, Germany. <https://ideas.repec.org/p/wpa/wuwpgt/0509018.html>
2. Haokip Thongkhola, India's Look East Policy: Prospects and Challenges for Northeast India, In Zahid Hussain (ed). India's Look East Policy and North East India: Achievements and Constraints, New Delhi: Concept Publishing, 2012
3. Sarma Amiya & Bezbaruah M P , Industry in the Development Perspective of North East India, Dialogue January - March, 2009 , Volume 10 No. 3
4. Baishya Kankana, Industrial Development in North East India: Challenges and Issues, [https://www.academia.edu/11767076/Industrial\\_Development\\_in\\_NE\\_India](https://www.academia.edu/11767076/Industrial_Development_in_NE_India)
5. Annual Report on Micro, Small, Medium Enterprise, various Years
6. NEDFi Data Bank



## UNIT- IV

### Section - I

#### Fiscal issues of North Eastern states

#### Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 Receipts
- 4.3 Expenditure
- 4.4 Concept of Deficit
- 4.5 Expenditure
- 4.6 Deficits
- 4.7 Outstanding Debt and Liabilities
- 4.8 14<sup>th</sup> Finance Commission's recommendation in share of Central Taxes
- 4.9 Let us sum up
- 4.10 Key terms
- 4.11 Long type question.
- 4.12 Short type questions:
- 4.13 Suggested Readings

#### 4.0 Introduction:

In order to understand the fiscal issues we need to understand the basic components of a budget. The budget has got two sides namely (i) Receipts and (ii) Expenditure

#### Receipts

##### (A) Revenue Receipts

- i. Tax Revenue
  - a) own tax revenue
  - b) share in central taxes
- ii. Non tax Revenue
  - a) grants from the centre
  - b) own non-tax revenue

##### (C) Capital Receipts

- a) Borrowings
- b) Non debt capital receipt's
- c) Recoveries of loan and advance

#### Expenditure

##### (B) Revenue Expenditure

- i. Social service
- ii. Economic service
- iii. interest payment
- iv. organ of the state

##### (D) Capital Expenditure

- i. Social Service
- ii. Economic service
- iii. Loan and Advance

## iv. Organ of the state

**4.1 Objectives:**

The objectives of the present unit are:

1. To understand the fundamental components of a budget.
2. To understand the different sources of revenue of the Government.
3. To understand the various types of expenditures.
4. To understand the implications of finance commission awards to the State Governments of North Eastern States.

**4.2 Receipts****Own tax revenue**

Generally all state and national government collect taxes. A state government collects taxes like state excise duties and other taxes like sales tax etc. (Now state GST). These types of collections are kept under own tax revenue head.

**Share in central taxes:**

Central government collects taxes like Income tax, corporation duty, export duty, imports duty etc. Finance commission decides about the sharing of centrally collected taxes between the centre and state government. As per 14<sup>th</sup> Finance commission 42% of the centrally collected taxes are distributed among the different states by a formula devised by finance commission.

**Non-tax revenue:**

The third important source of revenue to the state government is non-tax revenue. Under it, there are two important sub-components namely (i) Own non-tax revenue and (ii) Grants from the central government.

**Own non-tax revenue:** The state government collects different types of non-tax revenues like fees, fines, royalties etc. The examples are- (i) Patients pay some fee in government

hospitals for treatment (ii) Fines collected by Police (iii) Royalty received by the government from leasing out mines etc..These are kept under this head.

**Grants from the central government:** Apart from share in central taxes, the central government gives some grants to the state government under different programmes and schemes. These types of grants are kept under non-tax revenue.

### **Capital receipts:**

Under receipts side of a budget, capital receipt is the second important component. Capital receipts' has two sub-components namely (i) Borrowings (ii) Non-debt capital receipts.

**Borrowings:** The state Governments borrows from different agencies like central government and banking institutions like commercial banks, NABARD, pension funds etc. Further, they also issue public bond to raise revenue. Receipts through these agencies are treated as internal debt of the government.

**Non-Debt Capital receipts:** When the state government sells some public asset, the accrual is kept under this head. Examples are (i) Selling up of government land and old vehicles (ii) Disinvestment proceedings of public sector units etc.

**Recoveries of Loan and Advance:** The government gives loan to state public sector undertakings, and government servants. The recovery amount is kept under this head.

### **4.3 Expenditure**

The expenditure statement of the government is divided into two components (i) Revenue expenditure and (ii) Capital expenditure.

**(a) Revenue expenditure:** The expenditure which is of recurring type is known as revenue expenditure. The examples are (i) salary to employees (ii) Expenditure on petroleum (iii) office expenditure.

**Revenue Expenditure** has got four important components:

- (a) **Revenue expenditure in social service:** It includes revenue expenditure in Health, Education, Child nutrition and drinking water etc. These types of expenditures are known as Human Development Expenditure.
- (b) **Revenue expenditure in Economic service:** Here, revenue expenditure incurred in economic service like agriculture, industry tourism etc. are included.

- (c) **Interest payment:** Interest paid by the government for its past borrowing is kept here. It is one important component of revenue expenditure.
- (d) **Organs of the state:** The government spends in maintaining various functionaries of the government like State Assembly, Governor, and Chief Minister etc. These recurring expenditures are kept here as **Revenue expenditure under organs of the state.**
- (b) **Capital expenditure:** The expenditure which are meant for creation of Capital assets are kept under Developmental Capital expenditure and others are under Non-Developmental capital expenditure. So, capital expenditure under social service (Health, Education, Drinking water, child nutrition etc.) are known as developmental. Capital expenditure under loan and advance, repayment of past debt and organs of the states are known as non-developmental capital expenditure.

#### 4.4 Concept of Deficit

- a) **Revenue Deficit:** The difference between Revenue receipts and Revenue expenditure is known as Revenue Deficit; generally a surplus Revenue deficit is a healthy sign of a budget.
- b) **Fiscal Deficit:** It is defined as Revenue receipts + Non Debt Capital receipts – Total expenditure.
- c) **Primary Deficit:** It is defined as Fiscal deficit-Interest payment

With the background above, the fiscal issues of north-eastern states are discussed below;

#### Own tax Revenue

Table below 9.1 gives the details about own tax revenue of the north-eastern states

**Table 9.1**  
**Own tax Revenue (As a % of GSDP)**

States	2004-05	2009-10	2014-15(BE)
Arunachal Pradesh	1.4	2.3	4.0
Assam	5.1	5.2	6.3
Manipur	1.6	2.4	3.8
Meghalaya	3.2	3.5	5.0
Mizoram	1.5	2.0	2.6
Nagaland	1.3	1.7	2.5
Sikkim	5.1	3.6	4.3
Tripura	2.7	3.4	4.5
All states (All India) average	5.6	5.6	6.5

*Source: Report of 14<sup>th</sup> Finance Commission*

In 2004-05 own tax revenue at all India average was 5.6% of GSDP. The states like Arunachal Pradesh, Manipur, Mizoram, Nagaland and Tripura had very low level of own tax revenue, where as the states like Assam and Sikkim had comparatively better own tax revenue.

In 2009-10, all the states have improved their own tax improved their own tax revenue as a % of GSDP, except Sikkim. However, they were much below the national average. Assam performed better, as compared to others but the figure did not change much.

In 2014-15, own tax revenue of all the states substantially changed. At all India average it became 6.5%. For the states like Arunachal Pradesh, Assam, Meghalaya, Sikkim and Tripura, it became above 4 percent of GSDP. In the states like Mizoram and Nagaland, though there was improvement, but it remained around 2.5 percent of GSDP.

In a nut cell we can say that for all the North Eastern states, there was substantial improvement in own tax revenue collection in 2014-15 as compared to previous periods. However, they are yet to reach all India average in their own tax revenue collection effort.

### **Total Transfer from the Central Government**

Total transfer from the Central Government is composed of two components of receipts side of budget. First one is share in Central taxes and the second is grants from the centre. Table 5.2 gives the total transfer from the Central government to North Eastern states.

**Table 9.2**  
**Total transfer from Central Government (% of GSDP)**

States	2004-05	2009-10	2014-15(BE)
Arunachal Pradesh	36.7	48.3	58.8
Assam	11.5	12.7	20.7
Manipur	31.0	41.6	53.1
Meghalaya	18.4	21.5	38.1
Mizoram	51.7	51.9	55.0
Nagaland	28.8	32.4	56.9
Sikkim	46.7	27.3	39.1
Tripura	24.3	24.3	32.4
All states (All India) average	4.1	4.8	6.5

*Source: Report of 14<sup>th</sup> Finance Commission*

Table 9.2 shows dependency of the states on Central Government. In 2004-05 the highest dependency on Central inflow (as a percent of GSDP) was observed in the states of Mizoram, Sikkim and Arunachal Pradesh and the least was in Assam. The All India average was 4.1%.

In 2009-10, again the highest dependency was observed in Mizoram, Arunachal Pradesh and Manipur. In 2014-15, there was substantial improvement in Central transfer occurred the states like Arunachal Pradesh, Manipur, Mizoram and Nagaland, where Central inflow constitutes more than 50% of GSDP.

Thus, we can observe that central inflow is quite substantial in North Eastern States as compared to all India average.

## 4.5 Expenditure

### (2) Revenue Expenditure

Table 9.3 gives the Revenue expenditure of North Eastern states

**Table 9.3**  
**Revenue Expenditure (% of GSDP)**

States	2004-05	2009-10	2014-15(BE)
Arunachal Pradesh	43.3	49.4	53.1
Assam	19.2	22.1	27.5
Manipur	32.2	36.5	50.9
Meghalaya	24.3	25	40.8
Mizoram	52	21.4	52.8
Nagaland	28.9	30.9	50.3
Sikkim	99.1	44.6	41.8
Tripura	24.5	27.4	28.4
All states (All India) average	12.4	12.3	13.9

*Source: Report of 14<sup>th</sup> Finance Commission*

In 2004-05, at all India level, Revenue expenditure was 12.4% of GSDP. All the North-Eastern states had higher revenue expenditure as compared to national average. The highest was observed in Sikkim, where it was 99% of GSDP. The other states where revenue expenditure was substantially high are Arunachal Pradesh and Mizoram.

In 2009-10, revenue expenditure remained almost same as that of 2004-05. Substantial increase was observed in Arunachal Pradesh and Manipur.

In 2014-15, substantial increment in revenue expenditure took place in Arunachal Pradesh, Manipur, Mizoram and Nagaland where it was above 50% of GSDP.

So, we can infer that for all North-Eastern states, there was substantial improvement in revenue expenditure as compared to national average over time. The states, where it is substantial are Arunachal Pradesh, Manipur, Mizoram and Nagaland. Only in Assam and Tripura it is around 27-28% of GSDP.

## (b) Capital Expenditure

Here due to paucity of Comparable data for all the North-Eastern states, we have taken total capital expenditure which includes both Developmental and Non-developmental capital expenditure. Table 9.4 gives the detail.

**Table 9.4**  
**Capital Expenditure (% of GSDP)**

States	2004-05	2009-10	2014-15(BE)
Arunachal Pradesh	10.9	16.5	15.9
Assam	5.9	2.8	4.3
Manipur	10.5	19.3	11.7
Meghalaya	4.3	4.0	7.3
Mizoram	13.6	11.4	10.5
Nagaland	6.5	9.4	14.1
Sikkim	20.4	11.2	14.2
Tripura	7.2	8.8	13.6
All states (All India) average	2.3	2.5	2.7

*Source: Report of 14<sup>th</sup> Finance Commission*

At the all India level Capital expenditure revolves around 2.3 to 2.7 percent of GSDP during 2004-05 to 2014-15. In Arunachal Pradesh, there was an increase from 10.9% of GSDP to 15.9% during 2004-05 to 2014-15. However, a decline is observed in the Assam (5.9% to 4.3%), Mizoram (3.6% to 10.5%) and Sikkim (20.4% to 14.2%) in Capital expenditure during 2004-05 to 2014-15. An increasing trend is observed in Arunachal Pradesh, Manipur, Meghalaya, Nagaland and Tripura during the same time period. As we know, that the developmental capital expenditure is meant for capital creation in the Hilly state, the share is high and increasing over time, which is a good sign for the North-Eastern states.

## 4.6 Deficits

### (a) Revenue Deficit

The difference between Revenue receipt and Revenue expenditure is the Revenue Deficit. A surplus revenue account is a healthy sign for the state finance as revenue surplus is used for capital expenditure. Following table 9.5 gives the Revenue deficit data of all North Eastern States.

**Table 9.5**  
**Revenue Deficit (% of GSDP)**

States	2004-05	2009-10	2014-15(BE)
Arunachal Pradesh	0.2	-8.0	-14.5
Assam	0.5	1.4	-2.3
Manipur	-1.8	-10.4	-8.00
Meghalaya	0.8	-2.1	-5.1
Mizoram	-4.00	-5.0	-7.5
Nagaland	-2.7	-4.4	-10.4
Sikkim	-9.7	-8.4	-11.0
Tripura	-4.4	-1.2	-9.4

'+' indicates Deficit and '-' indicates surplus

*Source: Report of 14<sup>th</sup> Finance Commission*

Table 9.5 reveals that in 2004-05 except three states namely Arunachal Pradesh, Assam and Meghalaya, all the states were enjoying revenue surplus. In 2009-10, only Assam had revenue deficit. However, in 2014-15 all the North-Eastern states are enjoying revenue surplus, highest being enjoyed by Arunachal Pradesh, Nagaland, Sikkim and Tripura. Therefore, we may infer that the fiscal healths of all North-Eastern States are sound.

### **(b)Gross Fiscal Deficit**

In term of Budget identity, Gross Fiscal Deficit shows the quantum of borrowing by the sub national governments. Table 9.6 gives the Gross Fiscal Deficit of all North-Eastern States.

**Table 9.6**  
**Total transfer from Central Government (% of GSDP)**

States	2004-05	2009-10	2014-15(BE)
Arunachal Pradesh	11.1	5.8	1.4
Assam	3.9	4.2	2.0
Manipur	8.8	8.9	3.7
Meghalaya	4.8	1.8	2.2
Mizoram	8.8	5.9	2.7
Nagaland	3.7	5.0	3.7
Sikkim	10.7	2.8	3.2
Tripura	2.7	7.5	4.2

*Source: Report of 14<sup>th</sup> Finance Commission*

In 2004-05, Gross Fiscal Deficit (GFD) was highest for Arunachal Pradesh (11.1%). 12<sup>th</sup> Finance Commission proposed to reduce it to 3% of GSDP as a result FRBM was enacted in the state. As a result of which GFD was reduced substantially to 5.8% in 2009-10 and further to 1.4% in 2014-15. All the north-eastern states enacted FRBM act and in 2014-15, there was substantial reduction in GFD of all states. However, in 2014-15 the states like



Manipur, Nagaland, Sikkim and Tripura, the GFD was found to be at a higher side and maximum was observed in Tripura (4.2%), Manipur (3.7%) and Nagaland 3.7%.

#### 4.7 Outstanding Debt and Liabilities

Borrowing or Gross Fiscal deficit leads to accumulation of debt. 12<sup>th</sup> Finance Commission recommended 30% of GSDP as the safe limit to maintain Debt sustainability of the State Government and recommended for enactment of state level Fiscal Responsibility and Budget Management Act (FRBM). Following it, all State Government enacted FRBM Act.

Table 9.7 below gives the total outstanding Debt and Liabilities of the North-Eastern states.

**Table 9.7**  
**Outstanding Debt and Liabilities (% of GSDP)**

States	2004-05	2009-10	2014-15(BE)
Arunachal Pradesh	51.0	42.7	36.2
Assam	32.9	29.7	21.7
Manipur	60.00	66.9	49.2
Meghalaya	33.1	29.9	25.9
Mizoram	101.1	69.00	30.7
Nagaland	48.2	51.9	47.2
Sikkim	63.7	37.3	29.9
Tripura	47.00	37.4	33.00

*Source: Report of 14<sup>th</sup> Finance Commission*

In 2004-05, outstanding liabilities of all the North-Eastern states were above the limit prescribed by 12<sup>th</sup> Finance Commission. The highest was observed in Mizoram, where the ratio exceeded 100% of GSDP. In Assam and Meghalaya it was comparatively low.

In 2009-10, outstanding liabilities of all states got reduced except Manipur. Two states namely Assam and Meghalaya achieved the target fixed by 12<sup>th</sup> Finance Commission. However, in Manipur and Mizoram liabilities was substantially higher than the other states.

In 2014-15, there was further decline in outstanding liabilities as a % of GSDP for all states. The maximum was observed in Manipur, Nagaland and Arunachal Pradesh and the lowest was observed in Assam.

#### 4.8 14<sup>th</sup> Finance Commission's recommendation in share of Central Taxes

14<sup>th</sup> Finance Commission substantially increased the share of state in divisible pool of centrally collected taxes. 13<sup>th</sup> Finance Commission gave a share of 32 percent and 14<sup>th</sup>

Finance Commission gave a share of 42% of the centrally collected taxes to states. Inter-se share was finalised after giving the following weight age in the sharing formula of 14<sup>th</sup> Finance Commission, as given in table 9.8.

**Table 9.8**

<b>Weights fixed by 14<sup>th</sup> Finance Commission for sharing Central taxes</b>	
Criteria	Weights (%)
Population	17.5%
Demographic Change	10%
Income Distance	50%
Area	15%
Forest Cover	7.5%

On the basis of the weights recommended by 13<sup>th</sup> and 14<sup>th</sup> Finance Commission the share of the different north-eastern states is as follows (Table 9.9).

**Table 9.9: Inter-se share of States (%)**

	13 <sup>th</sup> Finance Commission	14 <sup>th</sup> Finance Commission
Arunachal Pradesh	0.328	1.370
Assam	3.628	3.311
Manipur	0.451	0.617
Meghalaya	0.408	0.642
Mizoram	0.269	0.460
Nagaland	0.314	0.498
Sikkim	0.239	0.367
Tripura	<u>0.511</u>	<u>0.642</u>
<b>Total N.E states</b>	<b>6.148</b>	<b>7.907</b>

*Source: Report of 14<sup>th</sup> Finance Commission*

Table 9.9 shows inter-se share of different north-eastern states in central taxes excluding service tax as recommended by 13<sup>th</sup> and 14<sup>th</sup> Finance Commission. Out of eight states all states

except Assam had an increase in their respective share in central taxes. The maximum gain in share was achieved by Arunachal Pradesh in 14<sup>th</sup> Finance Commission award as compared to 13<sup>th</sup> Finance Commission. Taking all the states together, 13<sup>th</sup> Finance Commission gave a share of 6.148 percent to North-East, where as 14<sup>th</sup> Finance Commission gave a share of 7.907% out of the total divisible pool of central taxes (excluding service tax). Thus, 14<sup>th</sup> Finance Commission award was boon to north-eastern states in general and Arunachal Pradesh in particular.

#### **4.9 Let us sum up:**

- The North-Eastern States are basically dependent on Central taxes except the State of Assam.
- The States like Arunachal Pradesh, Manipur, Mizoram, Nagaland and highly dependent on central transfer, where the Assam is least dependent.
- Own tax revenue base of the North Eastern States except Assam is low.
- Data Revenue and Capital expenditure of all the states are high as compared to national average.
- All the north Eastern states enjoy revenue surplus in recent times.
- Gross Fiscal Deficit of all the States is declining over time and is within manageable level.
- During 2004-05, total outstanding debt and liabilities of all North Eastern States was quite high, which has declined over time. However, except Assam, Meghalaya, Sikkim, Mizoram all other states have little bit higher level of outstanding liabilities in 2014-15.
- In the centrally collected taxes (except service tax) 13<sup>th</sup> Finance Commission gave a share of 6.148 percent, where as 14<sup>th</sup> Finance Commission gave a share of 7.907 percent.
- The gain of Arunachal Pradesh in the award of 14<sup>th</sup> Finance Commission is maximum, where it got a share of 1.37%. In 13<sup>th</sup> Finance Commission award it got a share of 0.328%.

**Check Your Progress**

Answer in 50 words

- (1) Define Own Tax Revenue.
- (2) What is Transfer from the Central Government ?
- (3) Differentiate between Revenue expenditure and Capital Expenditure
- (4) What are the sources of borrowings of state government ?
- (5) What is fiscal Deficit ?

**4.10 Key terms:**

1. Revenue Receipts
2. Tax revenue
3. Non-tax revenue
4. Own non-tax revenue
5. Grants from the Center
6. Share in Central taxes
7. Finance Commission
8. Revenue Deficit
9. Fiscal Deficit

**4.11 Long type question.**

1. Explain the different component of a Budget.
2. What is Revenue Deficit and Fiscal Deficit?
3. Explain the role of central transfer in the budget of North Eastern States.
4. Analyse the trend in revenue and Capital expenditure of North Eastern States?
5. Examine the trend in revenue and Fiscal Deficit of North Eastern States.
6. Critically analyse the outstanding Debt and liabilities of North Eastern States.
7. Explain the 13<sup>th</sup> and 14<sup>th</sup> Finance Commission's award to North Eastern States.

**4.12 Short type questions:**

Write short notes on

1. Revenue Receipt.
2. Capital Receipt
3. Revenue Expenditure
4. Capital Expenditure
5. Fiscal Deficit
6. Revenue Deficit.

**4.13 Suggested Readings**

- (1) Report of 13<sup>th</sup> Finance Commission, Government of India 2009
- (2) Report of 14<sup>th</sup> Finance Commission, Government of India 2014

## UNIT-V

### Section - II

#### Fiscal issues of North Eastern states

#### Structure

- 5.0 Introduction
- 5.1 Objectives
- 5.2 Types of Planning
- 5.3 Economic Planning in India
  - 5.3.1 Objectives of Economic Planning in India
  - 5.3.2 Evaluation of the Five Year Plans
  - 5.3.3 NITI (National Institution for Transforming India) AAYOG
  - 5.3.4 Regional Disparities in Growth rates
- 5.4 Five Year Plans and North Eastern States of India
- 5.5 Problems and Prospects of North East Economy in the background of economic liberalisation of India- Opening of NE economy
- 5.6 Key Words
- 5.7 Check Your Progress
- 5.8 Long Type Questions
- 5.9 Suggested Reading

#### 5.0 Introduction

#### Planning: Meaning and Importance

Economic Planning is defined as “a continuous process which involves decisions, or choices, about alternative ways of using available resources, with the aim of achieving particular goals at some time in the future.” A central authority, like the State, possessing the powers of implementation, does the planning.

#### Importance of Planning:

Planning plays an important role in the country especially in the Underdeveloped Country like India for the following reasons.

**1. Limited resources:** Since the resources- physical, natural, capital or human, are scarce, planning provides a method of rational and considered choice for securing the optimum combination of inputs.

**2. The need for social justice:** In a free enterprise economy, market forces operate in such a way that economic growth do not necessarily trickle-down. Often the growth ignores those people who deserve attention and need. Therefore, in such situation Planning helps to identify those deficiencies in the economy and the social structure, which demand the largest attention from the standpoint of economic growth.

**3. Mobilisation of Resources and its allocation:**

Since the resources are constraints, the plan for mobilising resources and savings is a necessary counterpart of the scheme of investment. The resources has to be allocated and distributed equally in the different sectors of the economy. In developing countries like India, the choice of development projects should rest on social benefits rather than private profitability. Hence, the intervention of state becomes necessary to optimise social gain from the utilisation of scarce resources.

**5.1 Objectives**

- (1) To understand meaning and objectives of Planning
- (2) To have an understanding of the planning process in the last few decades and the outcome in regional imbalance in North East India.
- (3) To have an idea of look East policy and its implication to North Eastern states of India.

**5.2 Types of Planning:**

The economic planning can broadly be of two types-

**1. Indicative Planning:**

This type of planning is democratic in nature. In this type of planning, the sphere of state intervention is limited to a) formulation of a plan and b) adoption of indirect controls. The state can issue guidelines, and not directives, leaving it to the market forces to decide their course of action. The capitalist economy follow this type of planning.

**2. Imperative Planning:** The socialist economy follow this type of planning. It is totalitarian in nature and works based on directions. It is made imperative on the production units to follow the plan and to fulfil the targets.

However, in a mixed economy like India both indicative and imperative planning co-exist.

### **5.3 Economic Planning in India:**

The government of India set up the Planning Commission in 1950 to make an assessment of the material, capital and human resources of the country and to formulate a plan for its most effective and balanced utilisation of the country's resources. India's experience with the economic planning is unique one as it is within the framework of a democratic mixed economy.

The National Planning Commission was a non-statutory, non-constitutional body. The major functions of the Commission was to formulate a plan for the most effective and balanced utilisation of the country's resources. The main objectives of the Planning commission are the following:

1. To increase production to the maximum possible extent to achieve higher level of national and per capita income.
2. To achieve full employment.
- 3 To reduce the inequalities of income and wealth
4. To set up a socialist society based on equality, justice, and absence of exploitation.

The Indian economy is gradually moving towards indicative planning where the Planning Commission concerns itself with the building of a long-term strategic vision of the future and decides on priorities of the nation.

#### **5.3.1 Objectives of Economic Planning in India**

The government of India launched the first Five-Year Plan in 1951. It initiated a process of development aimed not merely at raising the standards of living of the people and opening out to them new opportunities for a richer and more varied life. This was sought to be achieved by planning for growth and social justice. The basic aims of Economic Planning in India in the earlier plans was to bring about rapid economic growth through development of agriculture, industry, power, transport and communications and all other sectors of the economy. It aimed to achieve higher living standards. Nehru and Gandhi had differed on what economic policy should be, but they agreed on the centrality of economic development goals a top priority after independence, The Nehruvian view- derived predominantly from Fabian socialism. It endorse the need for rapid development led by state economic activity and planning. Within this broad objective, the early plans laid emphasis on the following:

1. Increase in national income.
2. Pushing up the rate of investment.



3. Ensuring social justice and equity.
4. Increase in employment.
5. Elimination of poverty.
6. To improve the three high-priority areas- agricultural production, the manufacturing capacity and the balance of payments.

The Second and Third Five Year Plans elaborately discussed some of these objectives. The subsequent plans simply reiterated the same objectives. Although, the broad objectives of planning remained the same, the relative emphasis and priorities shifted as the process of growth went ahead. The Fifth and Sixth Five Year Plan accorded the top priority on removal of poverty and self-reliance. The Seventh Plan stressed the modernisation. Modernisation implies a shift in the sectoral composition of production, diversification of activities and advancement of technology and institutional innovations to transform a feudal and colonial economy into a modern and independent economy.

The economic growth has been the major objective from the first to the present times. The country has witnessed fluctuations in the rate of economic growth but somehow it grows gradually. However, the social justice remain eluded and therefore the Eleventh Five year Plan introduced the objective of achieving faster and more inclusive growth which aims to provide greater opportunity for employment, greater capabilities, access to opportunities and security to protect the means of livelihood. The same objectives was carried forward in the Twelve Five Year Plans as well but with an aim to achieved sustainable developments

### **5.3.2 Evaluation of the Five Year Plans:**

The First Five-Year Plan (1951-56) provided an incisive general analysis of the nature of the country's development problem and various options from mobilising resources and achieving development with more equal distribution. In this period, India faced three major problems- influx of refugees, severe food shortage, and mounting inflation. The first five year plan gave special emphasise to the rural labor and land reforms. The plan projected an increase in savings and investment as a proportion of national income would rise from an estimated 5-6 percent in the early 1950s to 20 percent by 1968-69. It attempted a process of all-round development, which would ensure a rising national income and a steady improvement in the living standard of the people over a period of time.

The second five-year plan (1956-61) was more ambitious than the previous plan. It followed the two-sector model framed by P.C. Mahalanobis. One sector produced consumer goods and

the other investment goods, with sector-specific capital as the only factor of production. Based on the strategy of this model, the second plan aimed at heavy industrialisation with particular emphasis on the development of basic and heavy industries such as iron and steel, heavy chemicals, heavy engineering etc. Thereafter, the Government announced its Industrial Policy in 1956 accepting the establishment of a socialistic pattern of a society as the goal of economic policy.

The dominant growth orientation articulated in the Mahalanobis strategy of the Second Plan continued into the Third Plan. The Third Plan set its goal the establishment of a “*self-reliant and self-generating economy.*” It gave top priority to agriculture but it laid adequate emphasis on the development of basic industries. Later, the Third Plan shifted its priority to development to defense and development due to India’s conflict with China in 1962 and with Pakistan in 1965. However, a reasonable success was achieved during Second and Third Five Year Plan. Public sector investment in infrastructure and indirectly productive investments in universal intermediaries like steel, coal, power, and heavy electrical machinery increased considerably. Nevertheless, very little was achieved in case of small scale, cottage, and village industries as means of providing employment. In terms of aggregate performance, this phase witnessed a sustained growth in per capita incomes, distinct acceleration in public sector investment and in the growth of industrial output.

The first three five year plans were successful but due to two consecutive droughts and the foreign exchange crisis of the mid-1960s, the fourth plan could not be established as per the plan. The increased defence expenditure due to the conflict with China and Pakistan put the economy under severe strain. Therefore, three annual plans (1966-1969) called as Plan Holiday were implemented.

The Fourth Five Year Plan (1969-74) had two principal objectives- “*growth with stability and progressive achievement of self-reliance.*” It aimed at 5.5 percent average rates of growth in the national income and the provision of minimum for the weaker sections of the community. It also emphasised on the food security after facing two droughts.

The Fifth Plan (1974-79) recognised the inadequacy of growth and industrialisation to improve the living conditions of the people, particularly the poor. The concept of ‘*minimum needs*’ and slogans of *Garibi Hatoa* and ‘*growth with social justice*’ were the main concern of this plan.

There were two Sixth Plan (1978-83) due to the instability of the government; the first Sixth Plan framed by the Janata Dal was not successful. After the congress, defeated Janata dal, a new Sixth Plan was formulated (1980-85). While admiring Nehru Model the congress plan

shifted pattern of industrialisation with lower emphasis on heavy industries and more on infrastructure. The Sixth Plan witnessed a reasonable growth rate of 5.4 percent.

The Seventh Plan (1985-90) emphasis on the programmes and policies, which would increase the growth in food grain production, increase employment opportunity and raised productivity. It was also during this period that a reappraisal of the import-substitution strategy begins and a gradual liberalisation of the Indian economy is initiated.

The Eight Plan (1990-95) was overtaken by the crisis (balance of payment crisis, a raising debt burden, huge budget deficits, inflation, and recession in industry) of 1991 and the economic reforms. Due to this crisis, two-year plan holiday was introduced and it demanded a full appraisal of the planning methodology and the Eight Plan represents the first efforts at planning for a market-oriented economy.

After liberalisation, planning that was practised in the first four decades after independence was no longer tenable. The Ninth Plan was prepared under the United Front Government and was released in March 1998. Its focus was on "*Growth with Social Justice and Equality*." It assigned priority to agriculture and rural development with a view of generating adequate productive employment and eradication of poverty.

Following liberalisation, the subsequent Five Year Plans were indicative in nature. Therefore, the role of the public sector in the Indian economy has considerably shrunk and is shrinking further. The Tenth Five Year Plan (2002-07) aimed of doubling the per capita income in the next ten year. It aimed to achieve the 8 percent GDP growth rate for 2002-07. It also aimed to improve the basic social services, especially suggested health, availability of drinking water and basic sanitation. Universal access to primary education was given importance. The Tenth Plan recorded a highest growth rate in all the five year plans.

The Eleventh Five Year Plan (2002-2012) envisages a high growth of GDP like Tenth Plan and set goal in the form of moving "*Towards Faster and More Inclusive Growth*." The economy has performed well on the growth front, averaging 7.9 percent; the goal was paradoxically anti-labour and pro-corporate sector. This was in conflict with the goal of providing secure income and employment for common person. There was no policy for improvement of small and medium enterprises and small peasant agriculture. The removal of poverty required special attention but the planning commission were silent on some issues like food security, strengthening price support system, creation of price stabilisation fund for agricultural commodities, universalising crop insurance, protection to peasantry from subsidised imports of agricultural commodities and land reform.

### **5.3.3 NITI (National Institution for Transforming India) AAYOG:**

On 1<sup>st</sup> January 2015, the NITI Aayog came into existence as the government's premier thinktank. It replaced the erstwhile Planning Commission. The cabinet resolution lists 13 different tasks to NITI Aayog which may be grouped under four major heads, namely:

- i) Fostering cooperative federalism by providing structured support to states on a continuous basis;
- ii) Formulation of a strategic vision and long term policies and programme framework both for the macro economy and for different sectors;
- iii) Acting as a knowledge and innovations hub and providing research inputs by undertaking and accessing globally available research and
- iv) Providing a platform for interdepartmental coordination.
- v) NITI Aayog will have Prime Minister as its Chairman, vice-chairman cum Chief-Executive Officer (CEO), five fulltime members and two part time members, apart from four central government ministers.

### **5.3.4 Regional Disparities in Growth rates:**

India is a vast and diverse country. There is a regional variation in the growth and development of the states. Some states are exceedingly doing well than others in terms of growth of Gross State Domestic Product Growth. The inequalities exists not only between the states but also within the states. Even in some of the States with comparatively small geographical area, the levels of development are very uneven, especially in the Himalayan region of Nagaland, Mizoram, Arunachal Pradesh, Jammu & Kashmir (J&K), Himachal Pradesh and Uttarakhand. The unequal levels of development in the larger States, including several regions like Vidarbha region of Maharashtra; Koraput, Bolangir and Kalahandi (popularly known as KBK districts) of Orissa; Bundelkhand region, Eastern UP and parts of Central UP, northern Bihar, tribal areas of Jharkhand and Chhattisgarh, Andhra Pradesh, Maharashtra, UP and north Karnataka are a few examples. Such regional inequalities both between states and within states pose a serious development challenge to the Indian economy.

**Table 10.1**  
**State Wise Growth Rate in SDP for different plans period**

State\UT	Eighth Plan	Ninth Plan	Tenth Plan (2002-2007)	Eleventh Plan (2007-2012)
Andhra Pradesh	5.4	5.5	8.2	8.2
Bihar	3.9	3.7	6.9	9.9
Chhattisgarh			8.8	7.7
Goa	9.0	5.7	8.5	9.1
Gujarat	12.9	2.8	11.0	9.5
Haryana	5.2	6.1	9.0	9.0
Jharkhand			5.0	9.3
Karnataka	6.2	5.8	7.7	7.2
Kerala	6.5	5.2	8.3	8.2
Madhya Pradesh	6.6	4.5	5.0	9.2
Maharashtra	8.9	4.1	10.1	8.6
Odisha	2.3	5.1	9.2	7.1
Punjab	4.8	4.0	6.0	6.7
Rajasthan	8.0	5.3	7.1	8.5
Tamil Nadu	7.0	4.7	9.7	7.7
Uttar Pradesh	5.0	2.5	5.8	7.1
West Bengal	6.3	6.5	6.2	7.3
<b>Special Category States</b>				
Arunachal	5.0	6.6	6.2	8.5
Assam	2.8	1.8	5.0	6.8
Manipur	3.7	4.7	5.7	6.2
Meghalaya	4.0	7.2	6.7	7.8
Mizoram	N.A	5.7	5.9	10.8
Nagaland	7.2	6.5	7.4	6.2
. Sikkim	4.6	6.6	7.7	22.8
Tripura	6.7	9.4	6.9	8.9
<b>Average NE</b>	4.9	6.1	6.4	9.8
<b>All India</b>	7.5	5.5	7.8	8.0

**Source: Planning Commission, twelve Five Year Plan (2012-2017).**

Different scholars attributes many reasons for the regional disparities in India. They are inequities in access to social and physical infrastructure, lack of private sector investment, access to credit, and quality of human capita. In addition, institutions matter, and regions with better law and order and governance benefit in the form of higher and sustained growth. Taking note of the regional disparities the eleventh Five Year Plan laid emphasise on the reduction of inter-state inequalities in Per Capita Income (PCI). The increase in PCIs in turn will depend on the growth rates. Therefore, the acceleration of growth rates and related indicators are important to achieve the objective.

The growth rates of SDP show several interesting convergence trends. The growth rate of Orissa (2.3) and Bihar (3.9) which was the lowest in Eight Plan has increased significantly to 7.7 and 9.9 per cent respectively. Similarly, MP, UP and Rajasthan have all recorded growth rates of 7 per cent or more in the Eleventh Plan. Other states like Gujarat, Goa, Jharkhand and

Haryana also recorded an increase in growth rate of more than 9 per cent in Eleventh Five Year Plan.

In case of the Special Category States, Sikkim recorded, the highest growth rate in Eleventh Plan (22.8) followed by Mizoram (10.8) and Tripura (8.9). The growth rate of State Domestic Product (SDP) of Arunachal Pradesh has increased from 5.0 per cent in Eight Plan to 8.5 per cent in Eleventh Plan. All states has recorded an increased in the growth rate except Nagaland whose growth rate fluctuates from 7.2 percent in eighth plan to 6.5 in Ninth Plan, 7.4 per cent in Tenth Plan, and 6.2 percent in Eleventh Plan.

#### **5.4 Five Year Plans and North Eastern States of India**

NER comprises of eight States of the North- East (NE), including Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim. Special requirements of the NER and the need for significant levels of investment are now well recognised. Accordingly, efforts have been made since inception of the planning process to address the problems in the critical areas of development with special programmes and funding arrangements. There has also been continuous attempt to supplement development efforts of the Special Category States of NER by the Centre by providing Central Plan Assistance. Some of the programmes, like BADP, HADP, grants under Article 275(1) and BRGF are attempts to address some of the area specific problems in a limited way. Setting up of the North-Eastern Council (NEC) under NEC Act, 1971, as regional planning body has been another sincere step for balanced development of the region. In the latter part of the Ninth Plan, the announcement of 'New Initiatives for the North Eastern Region' in October 1996 gave further boost to the development process. Earmarking of at least 10 per cent of the Plan Budget of the Central Ministries/Departments for NER and creation of Non-lapsable Central Pool of Resources (NLCPR) were the outcome of this announcement. Both of these helped transfer of resources to the region.

Larger Plan investments and focus on infrastructure development has helped growth in this region. It is encouraging to note that there has been substantial improvement in the growth rate in the NE States, particularly in the Eleventh Plan. The growth rate of 6.1 per cent in the Ninth Plan improved to 6.4 per cent in the Tenth Plan, though less than the National Average of 7.8 per cent. The average GSDP growth of these States during Eleventh Plan improved to 9.8 per cent against 8 per cent at the national level. Average growth of NE States exceeded

the National average in the Eleventh Plan. If the exceptional growth of Sikkim is excluded, the average of seven States was 7.9 per cent. This improvement in the growth is due to concerted efforts of the Centre and the State.

The North-Eastern states has a large potential to develop and outgrow others states. It has vast untapped natural resources which if utilise properly can make the region vibrant. It has a large potential for producing hydro power of around 50000 MW but the pace of implementation has been poor. However, its evacuation of power poses a major challenge for several reasons. Firstly, lack of connectivity is one of the main problem. The entire capacity of power has to be evacuated through a narrow strip of about 25 km in West Bengal. Although no forest clearance is needed, land acquisition issues could pose problems, which need to be tackled. Second, the number of hydro power plants coming up in the region, especially in Arunachal Pradesh, is expected to be spread over the Twelfth and Thirteenth Plans but the transmission system has to be devised as a onetime operation and may therefore have redundancy initially. This will increase the costs of transmission. Thirdly, a number of States including Arunachal Pradesh, Tripura and Manipur do not have adequate 132/220/400 KV systems and this may cause problems in evacuation of power. Fourthly, the distribution system is inadequate and consequently leads to large power losses.

The development of roads in the North-East had been taken up by special programme under Special Accelerated Road Development Programme for North-East (SARDP-NE). It is proposed that the balance works under these programmes, which includes connectivity of all State capitals of North-East with two or four-lane NHs with paved shoulders and connecting all district headquarters with two-lane NHs will be taken up for completion. SARDP-NE Phase-B for which work has been taken up to prepare DPRs would be completed. It is planned to develop and complete the Trans- Arunachal Pradesh Highway during the Plan.

The Twelfth Five- Year Plan proposed to connect all the state capitals in the North East with the rest of the country by railways. New lines for connecting state capitals of Arunachal Pradesh, Manipur, Nagaland, Mizoram, and Meghalaya have been sanctioned and works are in progress. The work on these railway lines will be expedited so that all state capitals in the North East Region are on the rail map by 2020.

### **5.5 Problems and Prospects of North East Economy in the background of economic liberalisation of India- Opening of NE economy.**

Indian Economy was highly regulated during the first four decades of economic planning (1950-1990). On the one hand, the five-year plan focused on development of public sector for setting up of heavy and basic industries; on the other hand, it restricted the growth of private sector. India was facing huge balance of payment crisis, sick public sector enterprises, economic and financial crisis in early 1990s, which led to the introduction of New Economic Policy (NEP) in 1991. The three basic elements of economic reforms were liberalisation, privatisation, and globalisation of the Indian economy.

The government of India initiated the process of globalisation in 1991 and adopted different measures to integrate her economy with the world economy. One measure is liberalisation. Liberalisation is a process of opening up the national economy through the measures of de-control and de-regulation in order to facilitate the free flow of capital. Since, India has decided to integrate its economy with the rest of the world, the questions that arises is to what extent its different regions, and sub-regions has been integrated with the world. While there are many prospects for the development of North Eastern States in the backdrop of Economic Liberalisation, it is not free from problems.

#### **The problems are:**

1. **Lack of Entrepreneurial Class:** At the local or regional level, the presence of a competitive entrepreneurial class is a pre requisites criterion to reap the benefits of liberalisation. The greatest benefit of liberalisation is to be borne by the entrepreneurial class. However, North Eastern states lack entrepreneurial class. The entrepreneurial activities are absent among the tribal community and hardly any tribal engaged in trading or commercial activities. Therefore, the benefits would be reap by the rich mainland entrepreneurial class.
2. **Lack of Physical Infrastructures:** The North Eastern states can hardly attract private investment due to lack of physical infrastructures like road, railways and electricity.



3. **Socio-Political Conditions:** The socio-political conditions of North East acts as disincentive to the private investors. Outsiders are somehow considers as threat to the Tribals of north east for political or historical reasons. Inner Line Permits have been implemented in many states of North East, which regulates the free movement and the licensing principle is discriminatory in many states. Insurgency problem that exists in North Eastern states like in Nagaland, Assam and Some part of Arunachal Pradesh is a hindrance to attract the foreign and private investor. They collect taxes from the traders, entrepreneur, professionals, and even white-collar employee for their interest against the protection of the region.

### **Propects:**

While the states have manifold problems in respect to the liberalisation, there are huge prospects for the region to develop at par with the other states of India. The North Eastern States lags behind rest of the India in terms of economic indicators like industrial growth, power supply, urbanisation, credit facilities etc. Therefore, the people of this regions has the right to demand the development of own regions. If economic development has to be, meaningful it has to meet the specific needs of the regions.

After economic liberalisation, Indian economy has integrated with the world economy through FDIs capital flow and trade. This has opened up new avenues for exporters, entrepreneurs, and businesspersons across the country. North- Eastern regions has huge untapped natural resources, hotspots of unique tribal cultures and festivals, it has a huge potential to benefits from liberalisation. The region has vast mineral deposits, forest products, medicinal plants, horticultural products, traditional handlooms, and handicrafts items etc. These items can substantially improve its economic development process through effective participation in global trade and commerce. The region has 98% international borders with Bangladesh, Mynanmar, China, Bhutan and Nepal for which it can also develop boarder trade with the neighbouring countries

The government of India has initiated **Look East Policy** for which Northeast can benefit a lot. As part of Look East Policy, India is now one of four summit level partners – along with China, Japan, and Korea – of the Association of South East Asian Nations (ASEAN). Trade between India and ASEAN countries is expanding significantly. India has signed free trade area (FTA) agreements with Thailand and Singapore. There are a number of structures of

sub-regional cooperation in place including the Mekong-Ganga Cooperation (MGC) and BIMSTEC (Bangladesh, India, Myanmar, Sri Lanka, and Thailand – Economic Cooperation). Outside of ASEAN and bilateral trade between India and China has improved significantly.

The Look East Policy was renamed as Act East Policy and it was unveiled at the 12<sup>th</sup> ASEAN-India Summit in 2014. India was ASEAN sixth largest trading partner in 2017. Economic integration with South East Asia and its immediate neighbours offers enormous growth potential for Northeast. It could end the long decades of isolation for the remote region and turn it into a strategic bridge giving India access to the East. While markets in the North-East are much smaller than other regions in India,

The regions has a huge hydropower potential and if it is tapped and utilised properly it can be exported to its neighbouring international trade partners. The small-scale industries like pickle making, handlooms and handicrafts will also grow if proper roads and connectivity is built up. North East India is a hub of tourist attraction. Therefore, the development of roads and communication will boost its tourism sector.

However, there exists certain bottlenecks which ultimately curtail the promising future of northeast .Ethnic conflicts and insurgencies, presence of paramilitary forces, tight security apparatus, under developed physical infrastructure, lack of entrepreneurial spirit, lack proper marketing channels etc, pose serious challenges to the development of northeast. A broad based inclusive strategy can address these challenges and lead the regional economy towards sustained economic growth and social development.

## **5.6 Key Words**

- (1) Economic Planning
- (2) Indicative Planning
- (3) Imperative Planning
- (4) NITI Aayog
- (5) Look East Policy

### 5.7 Check Your Progress

**Explain in 50-100 words**

- (a) Explain the importance of Economic Planning**
- (b) What are various types of Planning?**
- (c) Explain various objectives of Planning.**
- (d) What are the objectives of Planning in India?**
- (e) What is NITI Aayog? How is it different from Planning Commission?**
- (f) What is Look East policy?**

### 5.8 Long Type Questions

- (1) Explain the Planning process and outcome in the context of North East India
- (2) Critically examine the objectives of Planning of different five years plan in India with reference to North Eastern States.
- (3) Give an outline of emerging regional disparities in growth rate during 8<sup>th</sup> to 11<sup>th</sup> five year plan in India.
- (4) Explain the problems and prospects of Look East Policy in the context of North Eastern States.

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