

Chapter 7

State of Infrastructure in Meghalaya

7.1 Introduction

The term infrastructure is of recent origin and does not have a rigid definition of its own. Ever since its use in development economics in early 1950s, its scope has got expanded, as many unknown facets of development/underdevelopment got unfolded in course of time. It has been used interchangeably with 'Social Overhead Capital' (SOC). Among the early development economists, Jacob Viner (1953) talked of the importance of overheads like education and health; Lewis (1955) of public utilities, ports, water supplies and electricity; and Higgins (1959) of transport, public utilities, schools and hospitals in promoting economic development. However, it was Hirschman who has given a very wide meaning to Social Overhead Capital or "Infrastructure". His concept of SOC includes education, public health, law and order, transportation, communications, power, water supply, irrigation and drainage. He mentioned four attributes of SOC, (i) the services are basic and facilitate economic activity; (ii) the services are usually public goods because of economic externalities; (iii) the services can not be imported; (iv) investments tend to be invisible or lumpy. In the Sixties, a number of studies brought out the importance of infrastructure in promoting agricultural growth. Thus a host of facilities in the rural economy such as agricultural research, extension and provision of rural financial institutions were brought under the scope of infrastructure (De Vries, 1960; Nichollas, 1963; Ishikawa, 1967). Youngson (1967) defines infrastructure as all those capital assets provided ahead of demand that possess two important characteristics viz., generation of external economies and factor indivisibility. Recently, World Development Report of the World Bank, 1994, has explicitly defined economic infrastructure to consist of the following provisions:

- (a) **Public Utilities:** Power, telecommunications, piped water supply, sanitation and sewerage, solid waste collection and disposal, piped gas
- (b) **Public works:** Roads, major dams, canal works for irrigation and drainage
- (c) **Other transport Sector:** Urban and inter-urban roadways, urban transport, ports and waterways and airports.

The Tenth Plan document of India defines infrastructure as "physical framework of facilities through which goods and services are provided to the public. Its linkages to the economy are multiple and complex, because it affects production and consumption directly, creates positive and negative spillover effects and involve large inflow of expenditure. Infrastructure also determines the effect of growth on poverty reduction".

From the foregoing discussion, it can be deduced that in a broad sense, infrastructure consists of all types of physical and social capital that (i) are basic to economic activity (ii) generate external economies, (iii) are lumpy in nature and provided ahead of demand or in response to excess of DPA (directly productive activities), (iv) does not, by and large, vary with the magnitude of production unless the scale of production changes or the technology of production is altered.

Infrastructure can be broadly divided into two types: physical and social. The former consists of transport (roads, railways, aviation, waterways and ports), electricity, irrigation, telecommunication,

housing and water supply. They work as direct intermediate inputs to production, and improvement in these inputs attracts flows of additional resources. Secondly, this also raises the productivity of other factors of production (labour and other capital) and profitability of the producing units thereby permitting higher levels of output. Initially, the development of transport, power, and communication was given more importance. It was, however, realized that the over all human development is not only related to the economic attainment. Eradication of diseases and ignorance is equally important for human welfare as eradication of poverty. This led to the call for public action in providing facilities such as educational and health, which may collectively be termed as social infrastructure. Social infrastructure like education, health, sanitation, etc, contribute to the development of the people and their well-being.

The rest of the chapter is organised as follows. Section 7.2 discusses the relationship between infrastructure and economic development. Section 7.3 discusses infrastructure development in India. In section 7.4 we look at the status of infrastructural facilities in Northeastern States, in general and in Meghalaya, in particular. In section 7.5 we provide key results on the status of rural infrastructure in Meghalaya from a field survey conducted by NCAER in 2001. We provide an infrastructure index and ranking of states in the NER based on the index in section 7.6. Section 7.7 concludes the chapter.

7.2 Infrastructure and Economic Development

The relationship between various types of infrastructure (social and economic) and economic development has been highlighted by Von Thunen (1842), Rosentein-Rodan (1943), Lewis(1955), Rostow (1960), Myrdal (1957), Mellor(1976), V.K.R.V.Rao (1980), Ruttan (1984), Munnell (1990), Aschauer 1990) and World Bank (1994), Fan, et al. (1999). Von Thunen, Lewis, Rodan and Myrdal have outlined the importance of economic infrastructure in pulling people from the rural areas to the urban areas and in the process promoting economic development by way of more of industrialization and increase in the productivity of labour in agriculture. However, it was Hirschman who very forcefully brings out the relationship between economic and social infrastructure and economic development. To quote him, “enlarged availability of electric power and of transportation facilities are essential preconditions for economic development practically everywhere” and “investment in social overhead capital is advocated not because of its direct effect on final output, but because it permits, and in fact invites, direct productive activities to come in”. The World Development Report 1994, very explicitly, maintains that rural infrastructure leads to agricultural expansion by increasing yields, farmers’ access to markets and availability of institutional finance. The adequate quantity and quality of infrastructure are key factors in influencing ability of countries to compete in global trade and can be instrumental in eradication of poverty. The infrastructure projects in the developing countries have both the forward and backward linkages. Implementation of these projects creates the demand for labour and heavy capital goods on the one hand, and their completion on the other hand, leads to opening up numerous opportunities for economic activities thus generating income and employment.

7.3 Infrastructure Development in India

Right from the first five-year plan, infrastructure development has been one of the most important objectives of Indian planning. However, as the scope of infrastructure is very wide, different degrees of emphasis have been given in successive plans on different types of infrastructure. However, the only perceptible change that is observed from the nineties is with regard to the nature of financing these infrastructural facilities i.e. in terms of the entry of the private sector to this field and building of public-private partnership.

The first five-year plan emphasised the role of agriculture in economic development of India and accordingly laid down maximum emphasis on agriculture related infrastructure like irrigation, power and roads. From here onwards till 1965, the emphasis continued to be on various types of economic and social infrastructure based on the Mahalanobis practice. However, infrastructure financing suffered some set back in 1965 because of the economic crisis. In the 4th plan, infrastructure development was viewed as an important strategy for balanced regional development. In this context, the plan argues “Growth and diversification of economic activity in an underdeveloped area can take place only if the infrastructure required for this is provided in an adequate measure and programmes for conservation and development of natural resources are undertaken”. Infrastructure financing suffered to some extent in the fifth plan because of the change in government policy from growth to redistribution. However, this was immediately corrected in the sixth plan and the sixth plan emphasised the need for massive public investment in rural infrastructure along with a number of measures to ensure that the fruits of economic progress are more equitably distributed in rural areas. The strengthening of the infrastructure for industry and agriculture was therefore adopted as the strategy for the sixth plan. The seventh plan tuned the provision of both social and economic infrastructure to the requirement of creation of more productive employment in the economy. The eighth plan also kept employment creation as its central objective and accordingly emphasized on strengthening the infrastructure (energy, transport, communications, and irrigation) in order to support the growth process on a sustainable basis. It also recognized that the social infrastructure has to be attended to with a degree of urgency in the next phase of development.

However, the practice of financing and creation of infrastructure was reexamined in the eighth plan in the context of growing realization that the provision of these services were becoming economically inefficient because of subsidization and cost escalation. In the wake of economic liberalization in the nineties, the concept of provision of infrastructure by the state alone was reviewed and the entry of the private sector in to this field was encouraged side by side with reduction in state subsidy in selected infrastructural services. However, this did not in any way led the state to give up its role as the provider of some of the basic social and economic infrastructure. The setting up of the Rural Infrastructure Development Fund (RIDF) in 1995-96 is a milestone in the field of provision of infrastructure for the rural areas. Under criticism from various quarters and the compulsions of domestic politics, the state is once again strengthening the rural infrastructure particularly the ones related to agriculture, public health and education.

However, with liberalization, the role of the state in the field of infrastructure has become many sided. In addition to its traditional role of a provider of basic infrastructure, it has to facilitate private initiative and investment in this sector, monitor such initiative and investment to see that the consumer of these services do not end up paying high prices.

7.4 Infrastructural facilities in Northeastern States and in Meghalaya

The first step in evaluating the status of infrastructure facilities in the northeastern states of India and also in the districts of Meghalaya, is to define the term infrastructure. As has been described earlier, there is no single definition of the term infrastructure and the sectors or activities that are included in it. Infrastructure is generally divided into economic infrastructure and social infrastructure, within which we have included facilities that are important to the region and for which the data are available. In economic infrastructure, we have included facilities such as road, power, irrigation, finance, and communication that are directly connected to the productive/economic activities of the people of the region. On the other hand social infrastructure includes educational and health facilities, which though

are not directly connected with the economic activities, yet are important for the over all well-being of the people. For details on health and educational infrastructure please refer to Chapter 3 and Chapter 4, respectively.

The purpose of the study is to measure the availability, conditions and growth of the infrastructural facilities (i) at the interstate level to measure and compare the position of Meghalaya with respect to the other northeast states¹ (ii) at the intrastate level to measure and compare the position of the districts in Meghalaya.

Different indicators have been used to measure each of the facility in order to bring out the different dimension of the facility under consideration. Wherever possible and depending upon the availability of the data, we have used more than one indicator to measure the different facilities.

In the study of the districts of Meghalaya we have, wherever possible, represented separately information on the districts of Ri Bhoi and South Garo hills². However, in many cases past data on these new districts are not available separately. In undertaking this study we also have been confronted with the problems of availability of data for certain facilities for different periods of time. This problem was especially acute in case of district level data. Our study has therefore been undertaken within these limitations of data and resources.

7.4.1 TRANSPORT

7.4.1a Roads: Development of an efficient transport network comprising of roads, railways and waterways is a prerequisite for any development activity in any state. In Meghalaya, road network³ is the only form of transportation that connects the state with the rest of the country and also areas within the state to one another. The importance of developing an efficient road network is paramount for linking the villages to markets in the state and outside. Not only is the developing of the road network a prerequisite for the development of the local economy, it is also necessary to give the people in the villages access to medical and higher education facilities that are available at the block and district headquarters. The table below shows the development of the road infrastructure in Meghalaya.

Table 7.1: Development of road network in Meghalaya

Road infrastructure in Meghalaya			Road density	
Year	Total length Kms	Percentage of surfaced roads	Per 100 sq. km	Per lakh persons
1971	6668	12.85	29.65	658.89
1981	5211	52.95	23.17	329.39
1991	6481	42.35	28.90	360.10
2006	8165	60.10	36.40	NA

Decadal change in the road length:	1980s	1990s
percentage increase	24.4	40.8

Source: Basics Road Statistics in India, various issues.

¹Sikkim is not included

²These districts created on June 1992 were formerly part of the districts of East Khasi Hills and West Garo Hills respectively.

³Discounting the fledgling air transport network that caters to a few.

In the last 35 years the road mileage in the state has increased by 22 per cent between 1971 and 2006 as shown in table 7.1. Along with the growth in the road mileage the percentage of surfaced road has also increased to 60 per cent from 13 per cent in the same period of time. The road density in relation to geographical area has also increased in the same time period. The road length maintained by the State Public Works Department (PWD) has more than doubled growing from 3315 Km in 1975-76 to 7978 Km in 2005-06. These developments in the road sector are given in tables 7.1 and 7.2.

Table 7.2: Development of road network in Meghalaya

Roads maintained by the PWD in Meghalaya (Km)			Road density	
Year	Total length Kms	Roads Surfaced	Per 100 sq. km	Per lakh persons*
1975-76	3315	1028 (31.01)	-	-
1980-81	3824	1405 (36.74)	17.05	286.3
1986-87	5219	2123 (40.67)	-	-
1990-91	5687	2407 (42.32)	25.4	320.4
1996-97	6491	3355 (51.68)	-	-
2000-01	7328	3413 (46.57)	32.8	317.8
2005-06	7978	4721 (59.17)	35.57	-

Note: Figures in brackets are percentages of total road length

*calculated against the 1981, 1991 and 2001 census.

Source: Directorate of Economics and Statistics, Govt. of Meghalaya.

The availability of road infrastructure in the northeast is generally poor compared to the other states in the country. The development of the road network in Meghalaya in respect of the other states in the region and its achievements in this sector measured in terms of standard indicator such as the road density per 100 square kilometers, is given in table 7.3.

Table 7.3: Road infrastructure in Northeast India

State	1979				2004-05*			
	Total length	% of surfaced roads	Road density		Total length	% of surfaced roads	Road density	
			Per 100 sq km.	Per '000 persons			Per 100 sq km.	Per '000 persons
Arunachal Pradesh	11553	20.74	13.82	21.43	14334	64.37	17.12	13.05
Assam	56983	14.73	72.59	3.19	37467	25.07	47.77	1.40
Manipur	8842	17.19	39.47	7.15	8648	52.88	38.73	3.99
Meghalaya	3690	39.97	16.04	3.17	7877	58.58	35.12	3.40
Mizoram	2916	37.24	13.82	7.48	4050	53.53	19.21	4.56
Nagaland	5785	24.06	35.06	10.11	12143	52.26	73.24	6.10
Tripura	7836	15.57	74.63	4.37	15780	23.90	150.49	4.93
All India	1604110	38.86	48.90	2.54	2525989	57.35	76.84	2.46

Note: * Figures for Nagaland are for 2002-03 and for All India, they are for 1999.

Source: Basic Road Statistics of India, 1978-79 and "Where Do We Stand in 2006" published by the Directorate of Economics and Statistics, Government of Meghalaya, Shillong.

In spite of the fact that only some of the northeastern states⁴ have negligible network of railways lines and therefore they have to rely on roads for freight and passenger transportation, the road density in these states is among the lowest in the country. The northeast average of 55 Kms of road per square kilometers is very low compared to all India average of 75 Kms. The variation in road density ranges from 150 Kms for Tripura to 17 in Arunachal Pradesh, with the road density in Meghalaya at 35 km per sq.km only in 2004-05.

Connectivity of villages: With about 80 per cent of the population residing in the villages in the region, connecting these villages to one another and to the nearest district roads, state roads, national highways is a priority for developing the rural areas. In the northeastern states, the number of unconnected villages has come down significantly, as seen in table 7.4. However, in Arunachal Pradesh and Meghalaya close to 50 per cent of the villages still remain unconnected by all weather roads. For Meghalaya the percentage of unconnected villages has decreased significantly from 1971 but still remains higher than the all India average.

Table 7.4: Percentage of Unconnected Villages in Northeast India

State	1971*	1991*	1997**	2001*	As on 10-12-2008 #
Arunachal Pradesh	NA	NA	59.44	NA	53.25
Assam	80.45	74.07	25.44	40.21	35.88
Manipur	86.70	77.31	54.04	47.80	38.34
Meghalaya	92.71	83.66	54.67	51.99	47.02
Mizoram	NA	NA	16.69	NA	29.69
Nagaland	90.83	86.60	11.67	9.63	3.60
Tripura	91.24	46.55	46.55	38.91	7.98
All India	74.87	63.02	39.84	39.32	32.18

Source: *State of the Indian Farmers (2004), ** Directorate of Economics and Statistics, Govt. of Meghalaya, # <http://omms.nic.in/aspnet/citizens/NAT/01NCH/NCHStateWiseHab.aspx>

For the districts in Meghalaya, the percentage of villages connected by pucca roads have definitely increased since 1981 (table 7.5). However, there is a wide variation in the availability of road infrastructure among the districts. In 1991, 27 per cent of the villages in Jaintia Hills were connected by pucca roads followed by East Khasi Hills at 24 per cent. In the rest of the districts only about 12 per cent of the villages were connected by pucca roads. The other districts have a very low percentage of villages connected by all weather roads ranging from 10 per cent to 19 percent. This clearly shows the poor status of rural road infrastructure in the State.

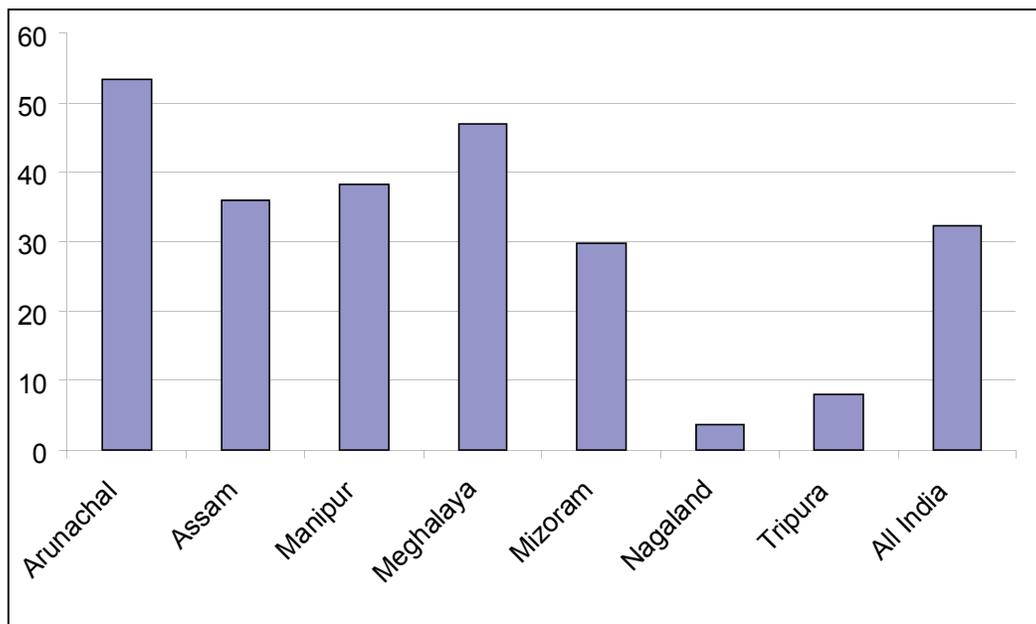
An important point that needs to be highlighted here is that majority of the villages that have not been connected by pucca roads are the small villages with population of less than 1000. With 56 per cent of the villages in the state having population less than 500, connecting all these villages that are located in the interior with all weather roads will need much resources.

With the launch of the Prime Minister's Gram Sadak Yojana (PMGSY) on 25th December 2000 which aimed to provide rural connectivity in rural areas of the country; some progress has been made

⁴States with railway network are Tripura, Assam, Manipur, and Nagaland.

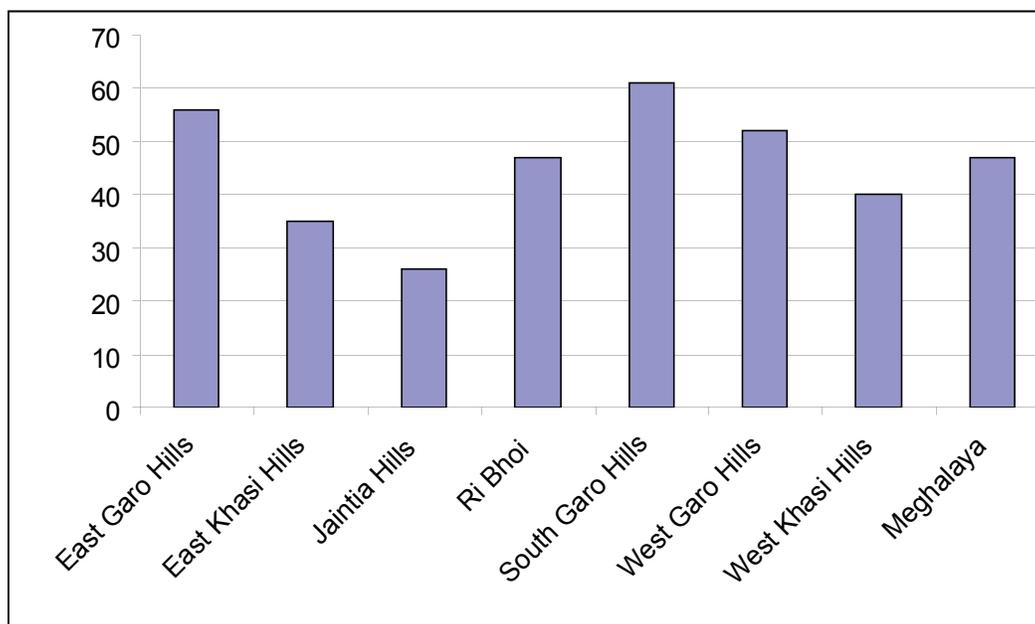
since 2000. The Programme envisages connecting all habitations with a population of 1000 persons and above (500 persons and above in respect of Hill States, Tribal and Desert areas). Table 7.6 shows that the number of habitations that are yet to be connected in all the districts of Meghalaya as in December, 2008.

Figure 7.1: Percentage of Unconnected Habitations in NE States as on 10-12-2008



<http://omms.nic.in/aspnet/citizens/NAT/01NCH/NCHStateWiseHab.aspx>

Figure 7.2: Percentage of Unconnected Habitations in Districts of Meghalaya as on 10-12-2008



<http://omms.nic.in/aspnet/citizens/NAT/01NCH/NCHStateWiseHab.aspx>

Table 7.5: Road infrastructure in the District of Meghalaya

State	Total length (in Kms)	Percentage of surfaced roads	Road density Per 100 sq km	Percentage of village connected by pucca road**	
	1987*			1981	1991
East Khasi hills	1811	46.71	35.5	19.0	26.2
West Khasi hills	728	36.26	13.9	7.61	11.9
East Garo hills	557	55.30	21.4	7.62	12.7
West Garo hills	1237	38.80	22.2	10.8	12.7
Ri Bhoi*	NA	NA	NA	10.5	19.3
South Garo hills*	NA	NA	NA	9.1	10.1
Jaintia hills	1066	42.87	28.0	11.88	27.1
Meghalaya	5399	42.50	24.1	11.1	16.4

Source: * Directorate of Economics and Statistics, Govt. of Meghalaya and **District Census Handbook, Census

Table 7.6: Number of Unconnected Habitations in Meghalaya, 2008

District/ Habitation Category	1000+	500-999	250-499	< 250	Total
Total Number of Habitations					
East Garo Hills	5	88	254	559	906
East Khasi Hills	49	148	212	435	844
Jaintia Hills	56	93	100	103	352
Ri Bhoi	18	98	163	261	540
South Garo Hills	1	11	87	528	627
West Garo Hills	55	169	421	795	1440
West Khasi Hills	28	106	214	298	646
Meghalaya	212	713	1451	2979	5355
Unconnected Habitations as on 01-04-2000					
East Garo Hills	0	22	124	391	537 (59)
East Khasi Hills	5	31	62	238	336 (40)
Jaintia Hills	0	16	37	66	119 (34)
Ri Bhoi	0	17	68	189	274 (51)
South Garo Hills	0	0	33	372	405 (65)
West Garo Hills	3	46	205	536	790 (55)
West Khasi Hills	1	18	70	199	288 (45)
Meghalaya	9	150	599	1991	2749 (51)
Unconnected Habitations as on 10-12-2008					
East Garo Hills	0	22	124	391	505 (56)
East Khasi Hills	5	31	62	238	295 (35)
Jaintia Hills	0	16	37	66	91 (26)
Ri Bhoi	0	17	68	189	251 (47)
South Garo Hills	0	0	33	372	380 (61)
West Garo Hills	3	46	205	536	741 (52)
West Khasi Hills	1	18	70	199	255 (40)
Meghalaya	9	150	599	1991	2518 (47)

Note: Figures in brackets are percentages of unconnected habitations out of the total number of habitations

Source: <http://omms.nic.in/citizens/en/STL/06SCH/NCHDistrictWiseHabs.asp>

7.4.1b Railways: The discussions on transportation system as a basic infrastructure that promotes growth of the economy will not be complete without taking into consideration the other important means of land transportation viz., railways. In most of the states in India, railway is an important means for movements of people as well as commodities. However, in the hill states of India the railway network is not well developed. An indicator of the development of railway transport is the railway route density, which in the northeast is very low for all states except for Assam (Table 7.7).

Table 7.7: Railway infrastructure in Northeast India

State	Railway Route length (Km)	Density of route length (per '000 sq. km. of area)
Arunachal Pradesh	1	0.01
Assam	2516	32.08
Manipur	1	0.04
Meghalaya	0	0
Mizoram	2	0.09
Nagaland	13	0.78
Tripura	45	4.29
All India	63140	19.21

Source: Background Paper Authors' calculation based on CMIE, March 2004

In the state of Meghalaya railway transportation is yet to be established, while in Arunachal Pradesh, Manipur and Mizoram the railway route length is under 2 Kilometers. Almost 98 per cent of the railway route length in the North east is in Assam.

7.4.2 POWER

Power is a prime mover of economic development. The availability of cheap, abundant and regular power supply is an essential condition for development and also one of the important determinants of the quality of life. There is a direct relationship between the growth of consumption of power and that of the economy. The state of Meghalaya has vast potential in generation of hydel power. In fact the generation of hydel power started in the early part of 20th century in the state. Table 7.8 shows the growth of installed and generation capacity of electricity in Meghalaya over a period of time. The installed capacity of power generation remained stagnant during the eighties, with 38 per cent growth recorded in the nineties only. In terms of accessibility of power, we find that 41 per cent of the villages have not been electrified as on 31-03-2008. This situation has only slightly improved in the last twenty five years.

Table 7.8: Power infrastructure in Meghalaya

Growth of installed and generation capacity of Electricity in Meghalaya.			Growth of Rural electrification in Meghalaya		
Year	Installed capacity MW	Generation MKWh	Year	Percentage of villages electrified	Percentage of rural population covered
1975-76	70.2	175.280	1985-86	26.9	50.81
1981-82	133.66	369.65	1988-89	39.5	51.23
1991-92	133.76	421.08	1991-92	42.2	67.78
2001-02	185.20	657.86	2001-02	47.0	56.16
2007-08	185.20	-	2007-08	59.3	-
Percentage increase in installed capacity			1990s: 38		

Source: Directorate of Economics and Statistics, Govt. of Meghalaya.

Box 7.1: Power Demand Position in Meghalaya

Present Unrestricted Demand	610 MW
Industries:	
Released Load -----	260 MW
Pending Load -----	220 MW
Domestic : -----	130 MW
Demand Forecast	
End of 11 th Plan (2012)	796 MW
End of 12 th Plan (2017)	1281MW

Source: Government of Meghalaya, Power Department

An important indicator of availability of power is the per capita consumption of power. The per capita consumption of power of the northeastern states is among the lowest in the country. Among the northeastern states, Meghalaya consumed power the most (318 kWh), this figure is however, still less than half compared to the all India average (373 kWh). Table 7.9 gives the per capita power consumption in the states along with the changes in power consumption in the region.

In order to capture the development of power infrastructure in the states we also look at the percentage of villages electrified. In the 1980s almost all the states had a very low percentage of villages electrified (Table 7.10). However, in the last two decades, states like Nagaland, Manipur and Tripura have been able to provide electricity to more than 90 per cent of their villages. In case of Meghalaya, not much progress seems to have been made in this area as half of the total number of villages in the state do not have access to electricity.

Table 7.9 : Per capita consumption of Electricity (in KWH)

States	1974-75	1981-82	1989-90	2004-05
Arunachal Pradesh	3.4	7.9	56.6	85.56
Assam	24.0	33.5	92.7	105.5*
Manipur	7.7	7.9	79.5	71.58
Meghalaya	31.3	31.0	106.4	317.77
Mizoram	4.3	5.6	65.0	141.44
Nagaland	27.2	34.2	58.6	84.7**
Tripura	6.0	14.5	45.0	95.5**
All India	174.9	120.5	236.0	373*

Note: * 2002-03, ** 1999-00

Source: 10th Plan document (2002-2007) and "Where Do We Stand in 2006" published by the Directorate of Economics and Statistics, Government of Meghalaya, Shillong.

It is important to note that in many of the states that have achieved very high percentage of village electrification; a vast majority of the households do not have access to electricity. In Meghalaya while the number of villages that have been electrified has increased from 19 per cent in 1981 to 45 per cent in 2001, yet we find that as many as 70 per cent of the rural households do not have access to electricity. This is due to the fact that a village is declared as electrified if power reaches the village even though only a few of the houses may have connection.

Table 7.10: Villages electrified in Northeast India

State	Percentage of villages electrified			Percentage of rural households having electricity (2001)
	1981	1991	2001	
Arunachal Pradesh	9.9	-	60.45	44.53
Assam	20.4	53.18	77.05	16.54
Manipur	16.5	57.38	91.70	52.53
Meghalaya	13.5	30.98	44.93	30.26
Mizoram	11.8	-	99.00	44.14
Nagaland	36	92.68	99.67	56.88
Tripura	17	72.05	95.09	31.75
All India	44.6	69.52	73.39	43.52

Source: Basics Statistics of Northeastern Region, 1982, 2002

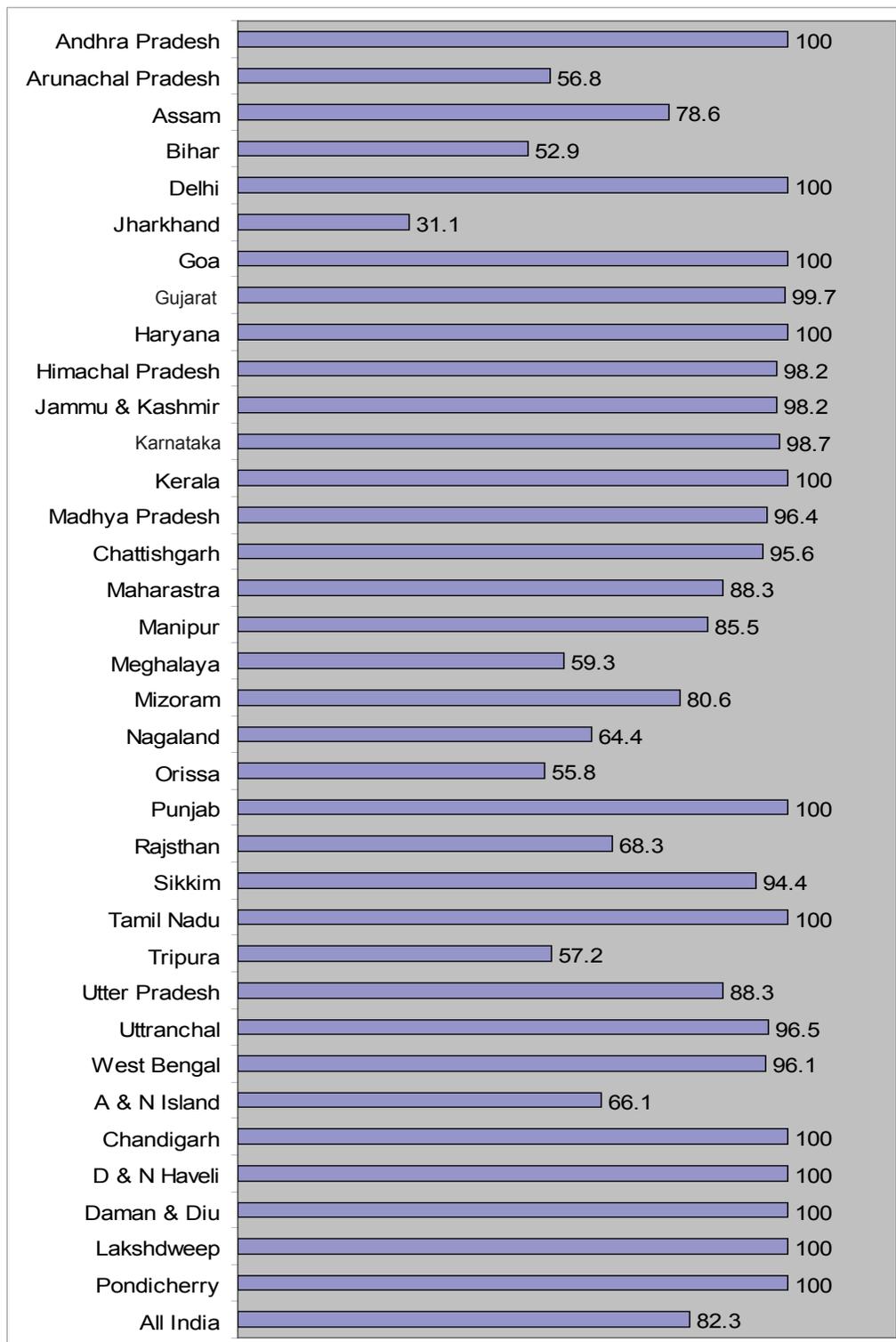
Table 7.11: Percentage of villages electrified in District of Meghalaya

Districts	1981	1991	2001
East Khasi hills	20.0	60.8	74.13
West Khasi hills	4.2	21.7	35.28
East Garo hills	7.2	18.0	33.22
West Garo hills	1.7	18.3	36.49
Ri Bhoi	18.7	53.00	66.11
South Garo hills	0.2	9.6	19.66
Jaintia hills	17.1	58.9	62.31
Meghalaya	8.1	30.9	44.93

Sources: Column 2 and 3: District Census Handbook, 1981 and 1991;
Column 4: Census of India, 2001

At the districts we find that there is wide variation in the percentage of villages electrified. In East Khasi Hills 74 percent and in Ri Bhoi 66 per cent of the villages are electrified while in South Garo hill the percentage of villages electrified is only 20 per cent (table 7.11).

Figure 7.3: Percentages of Electrified Villages in the States of India as on 30-10-2008



Source: <http://www.powermin.nic.in>

The progress of the state in pumpsets energisation, another programme of rural electrification, is also very tardy. As in May 2001 the total number of pumpsets energized was 100, which is only 0.7 per cent of its potential. This also partly explains the very low consumption of electricity by agriculture, which is around 1 Kwh as against an all India average of 89 Kwh. From 1986 to 1998 the sale of electricity to agriculture and irrigation in Meghalaya increased marginally from 0.05 Kwh to 1.42 Kwh. The same condition prevails in the other states in the region where per capita consumption of electricity by agriculture is between 1 and 3 kwh, except for Tripura where it is 13 kwh. There has also not been much development in the setting up of infrastructure facilities for tapping of non-conventional energy sources in the region. Of the total installed capacity of 1656.2 Megawatt (State of the Indian Farmers, 2004) of non-conventional energy power projects in India, the share of the northeastern states, including Sikkim, at 33.8 Megawatt is only 2 per cent of the country's total installed capacity. Of the 33.8 Megawatt, the share of Meghalaya is 4.4 per cent only.

7.4.3 COMMUNICATION

In the present knowledge economy information plays a very important role. However, the extent to which communication, more specifically, telecommunication can promote economic growth depends on the availability and the quality of the infrastructure facility connected to this sector. As per the data reported by CMIE (2004), in March 2002 the number of cellular and fixed line subscribers in the northeast was 743532, which is about 1.7 percent of the total number of cellular and fixed line subscribers at all India level. There has been a phenomenal growth in the cellular subscribers in the Northeast since this service was introduced in the late nineties. Between 1999-00 to 2002-03 the number of cellular subscribers has increased almost 9 times from 6545 to 56023.

As we do not have adequate data on the telecommunication at the state level, we have used the traditional indicators such as the availability of post and telegraph facility along with growth in telephone connectivity to measure availability of this facility in Meghalaya. Tables 7.12 and 7.13 reflect the growth in postal and telecommunication sector in Meghalaya.

Table 7.12: Growth in postal & telecom sectors in Meghalaya

Year	General post office	Head post office	Sub post office	Branch post office	Telephone exchange	Public call office	Telephone connections
1984-85	1	1	59	375	2	75	4707
1994-95	1	1	64	413	38	857	14558
1999-00	1	1	62	419	61	512	38146
2001-02	1	1	64	424	74	655	46283

Source: Directorate of Economics and Statistics, Govt. of Meghalaya

Table 7.13: Number of Telephone Connections in Meghalaya, 2007

District	Working Landline Connections		
	Urban	Rural	Total
East Khasi Hills	27233	18315	45548
West Khasi Hills	1430	739	2169
Ri-Bhoi	456	2783	3239
Jaintia Hills	2519	3648	6167
East Garo Hills	1211	501	1712
West Garo Hills	5979	3664	9643
South Garo Hills	360	113	473
Total	39188	29763	68951
Total	WLL connections		10592
	Mobile connections		62678
	Telephone Exchanges		114

Note: Data pertain to BSNL facilities only.

Source: BSNL, NE-I Telecom Circle, Shillong.

We measure the accessibility and spread of postal service in the region by considering the population and area under one post office. The growth of post office has not been able to keep pace with the growth of population, as a result of which, population served by one post office has increased in the whole country. On the other hand, the area under one post office has decreased for all states in the country. For Meghalaya the latest figure shows the ratio of population per post office being lower than the national average. However, in case of area to one post office, it is almost twice (46 sq. km) the all India average of 21 sq. km.

Table 7.14: Postal infrastructure in northeast India

State	Population under one post office			Area under one post office (in sq km)		
	1981	1991	2000	1981	1991	2000
Arunachal Pradesh	3292	3378	2856	435.2	329.69	278.07
Assam	5972	5925	5696	31.97	20.84	20.04
Manipur	2924	3020	2648	46.0	36.9	32.27
Meghalaya	3196	3862	3613	53.8	49.16	45.99
Mizoram	1968	2030	1724	84.01	62.37	52.74
Nagaland	3638	4537	3788	77.59	61.86	51.24
Tripura	3416	4122	3847	17.43	15.74	14.6
All India	4906	5675	5462	23.62	22.1	21.26

Source: 10th Plan document, Planning Commission, GOI.

In northeast India, the position of Meghalaya in respect to availability of post office in villages has increased from 3 percent to 8 percent from 1971 to 2000. In comparison to other states in the region, the availability of this facility in Meghalaya is very poor (table 7.15). Tripura with 81 per cent of villages having post offices has an excellent facility. Even states like Manipur and Nagaland have much better postal facility.

Table 7.15: Percentage of inhabited villages having post and telegraph office in Northeast India

State	Post offices			Post and telegraph offices	
	1971	1991	2000	1971	1991
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	7.38	12.33	14.69	0.82	0.82
Manipur	8.73	13.02	29.19	0.10	NA
Meghalaya	2.57	5.38	8.22	0.24	0.62
Mizoram	NA	NA	NA	NA	NA
Nagaland	6.87	12.83	26.44	0.21	0.16
Tripura	5.10	57.89	81.28	0.23	4.68
All India	14.36	22.48	23.36	0.92	2.38

Source: State of the Indian Farmers (2004).

In the districts of Meghalaya the percentage of villages having post and telegraph facility ranges from 17 per cent in East Khasi Hills to 3 per cent in South Garo hills in 1991. Between 1981 and 1991, there is only a marginal increase in the percentage inhabited villages having post and telegraph office in Meghalaya (table 7.16). The Census of India, 2001 shows decline in the percentage of villages having these facilities.

Post and telegraph infrastructure in districts of Meghalaya

Table 7.16: Percentage of inhabited villages having post and telegraph office in Meghalaya

District	1981	1991	2001*
East Khasi hills	8.8	7.9	1.27
West Khasi hills	5.07	7.0	0.95
East Garo hills	4.12	3.6	0.44
West Garo hills	3.3	4.6	0.65
Ribhoi	6.3	3.4	0.76
South Garo hills	4.6	2.7	0.40
Jaintia hills	8.24	16.66	1.86
Meghalaya	5.4	6.0	0.85

Note: * 2001 figures show the percentage of inhabited villages having post, telegraph and telephone facilities.

Source: District Census Handbook, 1981, 1991 and Census of India, 2001

7.4.4 IRRIGATION

With more than two thirds of the population dependent on agriculture, the provision of irrigation facility has always been a priority to the government for raising the productivity of agriculture. In Meghalaya from 1973-74 to 1998-99, the gross irrigated area has increased at an annual compound growth rate of 1.14, while the net irrigated area has risen by 0.68 per cent. During the same period the irrigation intensity improved from 102.6 to 115.9 (table 7.17). The growth of infrastructural facilities in Meghalaya in the last 25 years measured in terms of indicators such as gross and net irrigated area and the irrigation intensity are given in table 7.17.

Table 7.17: Development of irrigation infrastructure in Meghalaya

Year	Net irrigated area (in hectares)	Gross irrigated Area (in hectares)	Irrigation intensity Meghalaya	India
1973-74	44735	45912	102.6	123.8
1977-78	45310	46660	103.0	126.1
1980-81	49398	50873	103.0	128.6
1984-85	49354	49836	101.0	129.4
1990-91	46236	46970	101.6	131.6
1995-96	46998	47321	100.7	133.6
1998-99	47626	55182	115.9	132.4
2000-01	53752	62382	116.1	-

Compound annual growth rate 1973-74 to 1998-99.

	Net irrigation area	Gross irrigation area
Meghalaya	0.68	1.14

Source: Directorate of Economics and Statistics, Govt. of Meghalaya and State of the Indian Farmers (2004).

The percentage of gross irrigated area to gross sown area has improved for all the states in the region but there is considerably degree of variation. In Mizoram, the percentage of gross irrigated to gross sown area is 8 percent, while for Manipur it is 39 per cent. In Meghalaya, only 18 per cent of gross sown area has irrigation facility (Table 7.18).

There is also vast potential in minor irrigation in both surface and ground water in the region. However, very small percentage of the potential has been utilized. The comparison of the irrigation facility in the districts of Meghalaya has not been undertaken due to lack of data.

Table 7.18: Net and gross irrigated area and irrigated holdings

State	Net irrigated are as percentage of net sown area 1994-97	Gross irrigated are as percentage of gross sown area 1994-97	Percentage of holdings receiving irrigation 1991
Arunachal Pradesh	NA	14.8	NA
Assam	20.67	14.54	6.34
Manipur	46.43	39.28	45.77
Meghalaya	21.69	18.52	37.43
Mizoram	NA	8.3	NA
Nagaland	29.01	30.22	18.31
Tripura	12.64	13.44	11.32
All India	37.74	38.16	46.52

Source: State of the Indian Farmers (2004).

7.4.5 BANKING

The existence of a well-developed banking infrastructure is essential for the growth of all sectors of the economy. Accessibility to finance is key to the growth of any economic activity, especially in the region where saving and thrift culture has not traditionally been strong.

The Shillong Cooperative Town Bank Ltd. was established as the first credit cooperative society in the North Eastern Region on 03-09-1904. The banking industry started with the considerable presence of the State Bank of India and its branches, more for the State Government and its employees on behalf of the Reserve Bank of India, than for retail banking and the people in general. At present, Scheduled Commercial Banks (20 institutions), one Regional Rural Bank and one Cooperative Apex Bank besides 5 private banks provide formal credit in Meghalaya. The total number of branches or offices of scheduled commercial banks and of Regional Rural Bank has increased from 18 in 1974 to 189 in 2006. The Meghalaya State Co-operative Apex Bank Ltd. (MCAB) is the only State Cooperative Bank of Meghalaya. The number of its branches has increased from 27 in 1991 to 40 as on 31-03-2005 (Shreeranjana, 2006).

Table 7.19: Growth of bank offices in Meghalaya, 1983 to 2006

Years	State Bank of India	Nationalised Banks	Regional Rural Bank	Other scheduled commercial banks	Meghalaya State Co-operative Apex Bank	Total
1983	48	29	11	3	-	91
1991	77	36	50	3	27	193
2001	86	42	51	1	37	217
2005	86	43	51	2	40	222

Source: Credit Related Issues in Meghalaya, Shreeranjana, 2006, p. 91.

The availability of banking facility in the northeast region shows that while there has been an increase in the number of bank branches in all the states, the average population served per bank branch has increased for some of the states. For Meghalaya the same has improved during the period 1981 to 2004 (table 7.20). The average population per bank office in the state in 2006 was 10342.

Table 7.20: Area wise distribution of scheduled commercial bank branches in Northeastern States

State	Total branches		Average population (in 000) per bank office/branch		Credit-Deposit Ratio March 2004
	1981	2004	1981	2004	
Arunachal Pradesh	-	67	21	16	25.4
Assam	507	1221	29	22	32.5
Manipur	37	77	29	31	34.5
Meghalaya	59	180	17	13	30.6
Mizoram	12	78	12	11	39.3
Nagaland	40	69	13	28	17.9
Tripura	85	179	18	18	29.2

Source: Basic Statistics of NER (1982 & 2006), North Eastern Council, Shillong

Another indicator that is also linked to the development of banking infrastructure is the credit and deposit (C.D.) ratio. The northeastern region has the lowest credit deposit ratio in the country. For Meghalaya the C.D. ratio has decreased over the years. In 2002 the credit deposit ratio for the state was only 26 per cent, far below the national average of 58 per cent. The aggregate C.D. ratio of Meghalaya has improved to 30.6 percent as on 31-03-2004.

Meghalaya has 0.27 percent of the total scheduled commercial banks in the country, which is indicative of the poor status of banking facilities. The Regional Rural Bank has its presence in three of the seven districts. On the other hand, the state Cooperative Bank has its presence in all the seven districts. During the decade 1994-2004, the number of branches of scheduled commercial banks increased by only 2.25 percent, which is too marginal to make any effective dent in rural access to formal credit. However, during the same period, MCAB showed an increase of 21 percent in the number of its branches. Experience has shown that easy accessibility of banks to people can not only inculcate and improve banking habits but also substantially increase credit business. In Meghalaya, around the late 1970s, about 36 percent of the bank branches were located in the city of Shillong. However, by the end of March 2005, out of the total number of 222 branches of various banking institutions, 54 branches were serving the city of Shillong and the surrounding areas. *This means that 25 percent of the bank branches in Meghalaya serve just one city. Moreover, East Khasi Hills is the well-banked district with 90 branches out of 223 in 2006.* The regional spread of bank branches also appears to be skewed and lopsided. The Garo Hills region of the state having 37 percent of the population and 50 percent of the net sown area, has only 28 percent of the bank branches.

From the above analysis, it is clear that banks have functional and locational urban bias. Except for SBI, MCAB and to some extent RRB branches, all other banks have their presence only in East Khasi Hills, and that too, in Shillong Town (Shreeranjana, 2006, pp. 92-93).

Table 7.21: Banking infrastructure in the districts of Meghalaya, 2006

District	Percentage of Population	Number of branches	Percentage of branches	Population coverage per branch
East Khasi Hills	29	90	40	7344
West Khasi Hills	13	23	10	12788
Jaintia Hills	13	29	13	10200
Ri Bhoi	8	18	8	10711
East Garo Hills	11	18	8	13753
West Garo Hills	22	38	17	13574
South Garo Hills	4	7	3	14158
Meghalaya	100	223	100	10342

Source: Credit Related Issues in Meghalaya, Shreeranjana, 2006, p. 93.

7.4.6 IT INFRASTRUCTURE

The growth of the Information Science and Technology Industry or simply IT Industry in India since the mid 1980s has been phenomenal placing the country today as a global leader in this sector. While the southern states like Karnataka and Andhra Pradesh have made significant contribution to the growth of the IT industry, this industry is also recording a steady progress in other states in India. The North East has shown average e-readiness.

In Northeast India, in the absence of industrial growth, the IT industry can play an important role in transforming the backwardness of the economy and generating productive employment and economic growth in the region. The region possesses certain conducive feature for the growth of this industry like pool of educated English speaking manpower and climate conducive to the industry. It is for this reason that in recent times considerable attention and focus has been given to facilitate the development of this sector in the region. However, the prospect for the growth of this industry in the region will depend upon many critical factors, among them being the availability of physical infrastructure and manpower.

Some of the IT related infrastructure available in Meghalaya in 2007 includes 114 telephone exchanges, 7360 internet connections, 1298 broadband connections in Shillong, 2676 PCOs, and one private Internet Service Provider. The National e-governance Programme which is under implementation in the state will have

- (i) State wide Area Network (SWAN)
 - (ii) Common Service Centre (CSC)
 - (iii) State Data Centre
 - (iv) Several Central and State Mission mode applications along with capacity building.
- BSNL, NE-I Circle has the following development plans in Meghalaya for 2006-07.

Box 7.2: BSNL Development Plan for Meghalaya, 2006-07

New Exchanges	2
New WLL BTS	27
Provision of Wired line	1000
Provision of WLL Connection	10000
Broadband port capacity	2194

Source: BSNL, NE-I Telecom Circle, Shillong.

Box 7.3: Broad Band Multi-play Roll Out Plan in Meghalaya, 2007

Name of Station	Capacity	
Shillong	2064	Port
Jowai	544	Port
Nongpoh	248	Port
Nongstoin	184	Port
Baghmara	64	Port
Tura	424	Port
Wiliamnagar	128	Port

Source: BSNL, NE-I Telecom Circle

BSNL has identified the following constraints in the development of Telecom and IT facilities in the NE-I Telecom Circle comprising Meghalaya, Mizoram and Tripura.

- Law & Order problems: Restricted movements.
- Delay in project execution in the scenario of controlled environment of insecurity.
- Delayed OFC ring formations due to terrain and other logistic problems. In many cases, there is no alternate road for OFC ring formation. For example, Shillong-Silchar route.
- OFC faults due to landslides and asynchronous developmental works by NHAI, PWD, PHE & Municipal authorities.
- LOS problems for MW media and prolonged execution time of OFC schemes due to hilly terrain.
- Blockages in WLL/GSM coverage by hilly peaks.
- Difficulty in getting cable laying permissions from state government agencies. It is proposed that a cable duct provision should be made while making any new road project, the cost of this duct may be apportioned to BSNL. It is also proposed that state can give laying permission in lieu of their B/W requirements.
- Unavailability of reliable power

7.5 Status of rural infrastructure in Meghalaya - A field survey

In 2001, a study funded by NCAER was undertaken to find out the condition of infrastructural facilities in rural area of Meghalaya. For this purpose 81 villages were selected for the field study from East Khasi Hills and Jaintia Hills. The study used PRA methods to get the people's participation in rating the conditions of the roads, telephone, electricity, and water and sanitation facilities and in suggesting measures for improvement. Summary of the results of the field study are given below.

Table 7.22: Rural infrastructure in Meghalaya – Results from field survey

Infrastructure	Percentage
Villages with tarred internal roads	11 %
Villages with tarred external roads	51 %
Villages with telephone connection	20 %
Villages with electricity connection	74 %
Villages with piped water supply	35 %
Villages with drainage systems	38 %
Villages with latrines	59 %

Source: "Status of rural Infrastructure in Meghalaya, 2001 by A Dubey, S. Umdor and S. Das, a Report commissioned by the National Council of Applied Economic Research (NCAER), New Delhi.

The high percentage of villages having tarred external roads is because 16 of the 81 surveyed villages are from Myllem block⁵, which because of its proximity with the State Capital, Shillong have excellent

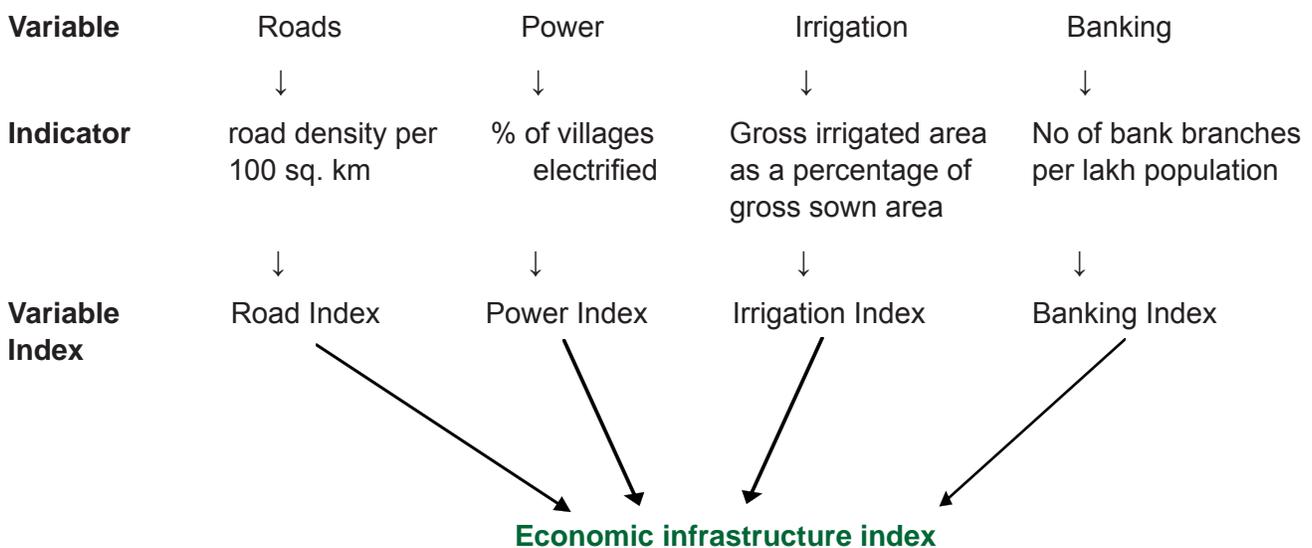
⁵Myllem block also includes large part of Shillong city itself.

roads. If we exclude this block, then the percentage of village shaving tarred external roads comes down to 17 per cent only. In many of the villages with tarred external roads, the conditions of these roads are found to be very bad. While the percentage of villages with telephone is only 20 per cent, in most cases the telephones at the villages are generally out of order for long periods of time. Public telephone office or PCO that is a common sight in most part of the country can hardly be seen in the rural areas of Meghalaya. Just 4 out of the 81 villages had public telephone facility. Most of the villages did have telephone towers installed by the government for providing telephone connection. However, this project has been abandoned halfway in many of the surveyed villages. While the percentage of villages electrified is 74 per cent, which is above the state average of 48 per cent, in most cases the villagers have reported not getting quality and regular power supply, especially during the monsoon. The provision of safe drinking water facility and sanitations, are also grossly inadequate in the villages in the state (table 7.22).

7.6 Infrastructure Index

We have made an attempt to prepare an index of infrastructure for the state of Meghalaya so as to find out its relative position vis-a-vis the rest of the north eastern states in the field of infrastructure. Initially, we wanted to prepare an index for economic infrastructure and social infrastructure separately and then taking them together an index for the whole of infrastructure. However, data constraints with regard to the indicators of health infrastructure, did not permit us to construct the social infrastructure index. Hence, we have constructed an index for economic infrastructure only. The methodology adopted is as follows:

CONSTRUCTION OF ECONOMIC INFRASTRUCTURE INDEX



The maximum and minimum values for the different indicators are given below:

Indicator	Maximum Value*	Minimum Value*
Road Density per 100 Sq. km. (1999)	381.70	10.70
% of villages electrified (2001)	100	0
Gross irrigated area as a percentage of gross sown area (1997)	100	0
No of bank branches per lakh population(1999)	25.63**	3.90**

*Maximum value for road indicator is that of Kerela and the minimum value is for Jammu and Kashmir for year 1999.

** Maximum Value is for Goa and Minimum value for Manipur for 1999.

Using the formula:
$$\frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

We have calculated the infrastructure Index for all the north eastern states in a scale of 0 -1. The index values for all the states and their respective ranks on the basis of this index are given as follows:

Table 7.23: Infrastructure index and States Ranking

States	Index Value	Rank
Nagaland	0.39	1
Tripura	0.37	2
Manipur	0.35	3
Mizoram	0.33	4
Assam	0.30	5
Meghalaya	0.23	6
Arunachal Pradesh	0.22	7

Source: Background Paper Authors' Calculation

It is clear from this index that Meghalaya is lagging behind most of the other northeastern states on the indicators of infrastructural facilities used above. The above four infrastructure variables used in preparing the index represent four of the core economic infrastructures. However, this index has been prepared without taking in to consideration Railway infrastructure, Water transport, posts and telegraphs facilities and telecommunication infrastructure. The ranking may change, if these infrastructural facilities are included in the construction of this index. The position of Assam will definitely improve if railway infrastructure is included. However, for the rest of the 6 states, it will mostly remain the same as railway is non existent in Meghalaya, and has very very minor presence in Manipur (1 K.M.), Mizoram (2 K.M.) and Arunachal Pradesh (1 K.M.)

Relative growth in infrastructure in Meghalaya during the last two decades: In order to measure the rate of progress of infrastructural facilities in the state in comparison with the all India position, we have prepared a relative index of infrastructure of some selected variables. This index exhibits the change in the relative position of Meghalaya vis-a-vis all India, and it shows if the gap in the availability of these infrastructure indicators is widening or narrowing with respect to the all India position. Table 7.24 gives us the transformed values for two periods of time with which we can measure the relative progress of Meghalaya with that of India in respect of the above infrastructure facilities.

Table 7.24: Relative Infrastructure index for Meghalaya
(Transformed Values - India 100)

Infrastructural indicators	1980s	2000
Surfaced road per 100 square km.	55	43
Villages electrified (%)	31	63
Area under one post office (sq Km)	225	219
Net irrigated area to net cultivated area (%)	93	58
Credit deposit ratio (%)	29	25

Source: Background Paper Authors' Calculation

For capturing the relative changes we have used the following formula:

$\frac{X_m}{X_i} \times 100$ Where X_m stands for indicator value of Meghalaya and X_i stands for indicator value of India.

Table 7.25: Changes in availability of selected infrastructure in Meghalaya vis-a-vis India

Infrastructural indicators	Indicator value			Indicator value		
	Year	Meghalaya	India	Year	Meghalaya	India
Surfaced road per square km.*	1982	12	22	1997	17	42
Villages electrified (%)**	1981	14	45	2001	46	73
Area under one post office (sq Km)#	1980	54	24	2000	46	21
Net irrigated area to net cultivated area (%) ##	1981	26	28	1994-97	22	38
Credit deposit ratio (%) \$	1981	20	68	1997	14	57

Source: * Directorate of Economics and Statistics

** Census of India, 1981 and 2001

10th Plan document, Planning Commission, Government of India.

State of Indian Farmers, 2004

\$ Basic Statistic of NER (1982 & 2002), NEC, Shillong.

The above analysis shows that in respect of road, postal, irrigation and banking infrastructures, the position of Meghalaya with respect to the Indian average has deteriorated in the last twenty years, which is a matter of concern. The deterioration is very sharp in irrigation sector. It is only in respect of the village electrification that the relative position has improved, although it is still below the Indian average.

7.7 Conclusion

The study of the state of infrastructure in Meghalaya clearly reflects the poor status of the economic infrastructure. While the infrastructure of the states in the northeast, is generally poor compared to the rest of the country, that of Meghalaya is much worse compared to some of its neighboring states. According to the composite infrastructure index devised by the Eleventh Finance Commission for 1999, Meghalaya has been ranked fifth from the bottom in terms of the availability of physical, social and institutional infrastructure; with states like Manipur, Tripura, Jammu & Kashmir and Arunachal Pradesh ranked lower than Meghalaya. The Twelfth finance commission prepared an index of

infrastructure for the purpose of allocation of resources among states. In their exercise they focus on concerns relating to the effect of infrastructure on the cost and quality of governance and more specifically the provision of public services. It prepared this index taking in to consideration three important dimensions: power, communications and transportation. On the basis of this index, the seven north eastern states are in descending order ranked as given in Table 7.26.

Table 7.26: Twelfth Finance Commission Ranking of the North Eastern States by Infrastructure Index

States	Rank
Tripura	1
Assam	2
Nagaland	3
Meghalaya	4
Mizoram	5
Manipur	6
Arunachal Pradesh	7

Source: Report of the Twelve Finance Commission November, 2004, Government of Meghalaya.

Our analysis at section 7.6 placed Meghalaya at the 6th position in the ranking of 7 North Eastern states. Further, in the last twenty years the gap in the relative availability of some of key infrastructural facilities like road, postal, irrigation and banking in Meghalaya compared to rest of the country has widened.

At the district level, the availability of infrastructure is skewed. East Khasi Hills and Jaintia Hills districts are comparatively well off in terms of availability of both economic and social infrastructure. In case of the rural areas the field study conducted in 2001 shows the poor state of rural infrastructure in Meghalaya. Key infrastructural facilities are not available in a large number of villages. Also, wherever these infrastructural facilities are available, their quality is poor. In Meghalaya, the private sector has played a pivotal role in the field of health and education. Now, with the entry of private sector in the infrastructure sector being encouraged, the role played by the private sector in providing social infrastructural facilities in the state of Meghalaya needs to be analysed.

The above account of the growth of economic infrastructure in the North East in general and Meghalaya in particular, is a story of growing regional imbalance. Therefore, there is an urgent need for central intervention to correct this imbalance.