

# CHAPTER – I

## INTRODUCTION

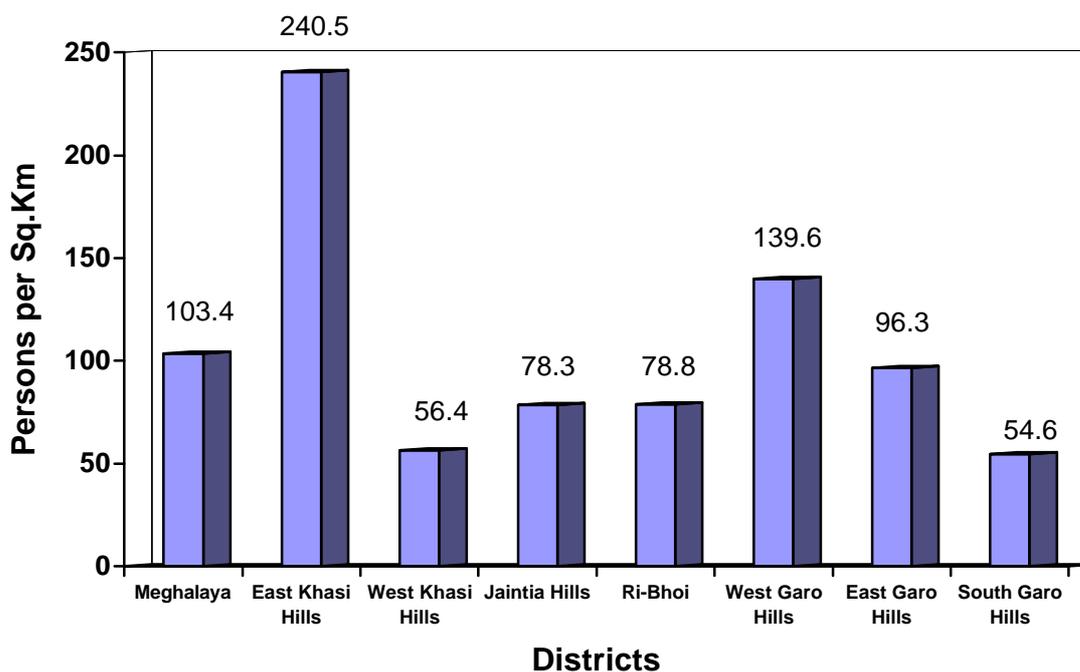
**1.1. Area & Location:** Meghalaya was first created as an Autonomous State within the State of Assam on the 2<sup>nd</sup> April, 1970 with the two erstwhile Districts of Assam, viz: the United Khasi & Jaintia Hills District and the Garo Hills District. The Autonomous State was upgraded into a full fledged State with effect from the 21<sup>st</sup> January, 1972. The State has a geographical area of 22,429 Sq. Kms approximately and has now 7 Districts viz : (i) East Khasi Hills District (ii) West Khasi Hills District (iii) Jaintia Hills District (iv) Ri-Bhoi District (v) West Garo Hills District (vi) East Garo Hills District and (vii) South Garo Hills District. At the beginning, the State had 24 C&RD Blocks but the number had increased to 39 as at the end of 2001-2002. It is one of the smallest States in India and is strategically located in the North-East between 25° 5” and 26° 10” North Latitudes and between 98° 47” and 97° 47” East Longitudes. It is a strip of land spread along the northern boundary of Bangladesh and it is bounded by that country on the South as well as on the West. The length of the International boundary is about 423 Kms. The State is surrounded on the other sides by Assam which provides the access to it mainly by road. The land surface of the State mostly comprised of hills and table lands with the hills sloping gently towards Assam on the north but rather steeply and abruptly towards Bangladesh on the south. The land surface of Meghalaya is also characterized with small patches of beautiful valley land, fresh streams and rivers and deep gorges.

**1.2. Population:** As per 2001 Census, the total population of the State is 23,18,822 as against 17,74,778 in 1991 indicating a decadal growth of 30.65 percent.. Around 80.4 percent of the population of the State lives in rural areas. The State’s population is pre-dominantly tribal and constitutes 85.9 percent of the total population. The Scheduled Caste population is barely 0.5 percent and the Others form 13.6 percent of the total population of the State. The number of villages as per 2001 Census is 5,782 as against 5,484 in 1991 Census. As against the State’s sex ratio of 972 in 2001 census, the sex ratio among Scheduled Tribes and Scheduled Castes is 1,000 and 882 respectively. The main workers constitute 32.6 percent while the marginal workers constitute 9.2 percent.

The following table shows the district-wise population of Meghalaya as per 2001 census :-

District	Headquarter	Area	Population (2001 Census)	Population Density [persons per Sq.Km]
1.East Khasi Hills	Shillong	2,748 Sq. Kms	6,60,923	240.5
2.West Khasi Hills	Nongstoin	5,247 Sq. Kms	2,96,049	56.4
3.Jaintia Hills	Jowai	3,819 Sq. Kms	2,99,108	78.3
4.Ri-Bhoi	Nongpoh	2,448 Sq. Kms	1,92,790	78.8
5.West Garo Hills	Tura	3,714 Sq. Kms	5,18,390	139.6
6.East Garo Hills	Williamnagar	2,603 Sq. Kms	2,50,582	96.3
7.South Garo Hills	Baghmara	1,850 Sq. Kms	1,00,980	54.6
<b>Total</b>		<b>22,429 Sq.Kms</b>	<b>23,18,822</b>	<b>103.4</b>

## Density of Population in Meghalaya 2001 census



**1.3. Natural Resources:** The State is richly endowed with natural resources. The heavy and long monsoon sustains intensive and varied flora. Forests cover a land surface of 9,500 Sq. Kms or 42.35 percent of the total area of the State (1998-99 figure). However, the area of reserved forests under the control of the State Government, however, is small. The total coal reserves have been estimated at 6301 million tonnes as against the limestone

reserves of 5000 million tonnes. Considerable quantities of these minerals have already been exploited over the years and exploitation is going on without any restriction. The deposit of industrial clay is about 71 million tonnes. Other commercially exploitable mineral deposits are Kaolin, feldspar, glass sand etc. The State has also rich deposits of Uranium. The hydro-power potential of the State is assessed at around 3,000 MW of which 185.2 MW only has been tapped so far.

**1.4. Soil and Rainfall:** By and large, the soil in the State is acidic in nature and comparatively rich in organic matter and nitrogen but poor in phosphorous. Due to heavy rainfall, the soil in the border area tends to be sandy. The Mawsynram, Cherrapunjee, Pynursla belt in Khasi Hills along the southern border records a rainfall varying between 1,000 mms to 15,000 mms per year. Streams and rivers fed by heavy rainfall and passing down the hilly slopes and cascades provide abundant hydro power potential in the State. On the other hand, deforestation taking place over the years has exposed the hills to natural vagaries which have caused large scale erosion of the top soil and huge amount of soil is washed away every year. This also led to poor water retention, reduced soil fertility and other problems. The State Government has been taking up continuous soil and water conservation measures within the limited resources available to counter-act this menace.

**1.5. Environment:** Three decades ago Meghalaya possessed unique natural environment explicit in its bountiful forest rich in flora and fauna, its clear streams and rivers rich in water life, its beautiful grass land and fresh air to breathe every where. However, with the increase in population over the years, there has been corresponding increase in aggregate demand leading to more economic activities and these factors combined with the opening up of road communication paved the way for exploitation of forests, minerals and other resources and this put the serene environment of the State into severe stress and strain. Large scale felling of trees for timber, shifting cultivation and other purposes during the last three decades or so had caused much devastation to the then rich flora and fauna of the State. However, the restriction imposed by the Hon'ble Supreme Court on the exploitation of timber in recent years has begun to show positive results by way of improving the overall greenery scenario of the State. The worse is, however, the indiscriminate and unscientific exploitation of coal reserves which not only deprived the State of optimum returns but also caused havoc to the environment in terms of land, water and air. This needs to be taken as a lesson for further mining activities in the case of coal, limestone and other minerals. Though the use of pesticides for control of pests in paddy fields has improved food grain production to some extent but on the contrary it has also robbed of farmers from their fields all eatable species of

fish so dear to them which become more or less extinct. There has also been rampant using and mindless throwing of low cost plastic bags both in urban and rural areas which have created an ugly scene to the affected areas. Further, the increasing pace of industrialisation taking place in the State added more pressure on the environment. Protection of the State's environment from the adverse effect of different economic activities is a great cause of concern which needs to be taken care of properly.

## **1.6. ECONOMIC SITUATION :**

**1.6.1. Backward Characteristics:** Meghalaya's economy is primarily agricultural engaging around 66 per cent of its total work force. However, the contribution of agriculture to the State's NSDP is around 33 percent only as against the contribution of around 55 percent by the tertiary sector. With the increase in population over the years and the corresponding decrease in availability of land for agricultural purposes, the incidence of landless labour and the resultant poverty has risen substantially. Inadequate infrastructural facilities, poor road communication due to hilly terrain and unemployment have been the major constraints of economic growth. Despite possessing a fairly rich resource endowment which could provide the base for an adequate rate of economic growth, Meghalaya is still an industrially backward State. Investment for industrial development for generating income and employment have been encouraged through a number of incentives in pursuance of the State's Industrial Policy, 1997 and recently a number of units have come up especially at the EPIP, Byrnihat and the Industrial area near Umiam lake. However, the impact of these industrial investments on the State's economy is yet to be ascertained.

Besides having a low per capita income of Rs. 11278 (Adv.) during 2004-05 at constant 1993-94 prices against a national per capita income of Rs.11,684 (Adv.), Meghalaya's backwardness is also explicit from the manner of exploitation of its natural resources and exportation of the same to markets outside the State mostly in primary form, thus losing the benefits of backward and forward economic linkages. In the three decades of its existence, Meghalaya as a State has witnessed tremendous uneconomic and unscientific exploitation of its natural and mineral resources. The exploitation of timber would have brought the ecology and environment of the State into an alarming situation had it not been for the restriction imposed by the Hon'ble Supreme Court in 1996-97. As at present, coal mining in Jaintia Hills, West Khasi Hills, East Garo Hills and South Garo Hills is going on unabated in an uneconomic and unscientific manner and the environment is adversely affected with future generations to suffer. Limestone is also exploited and exported in

primary form except for portion consumed by the State's Cement factories. It is very essential, therefore, to evolve an appropriate approach and strategy for the development of these hills in a proper way by tapping the resources scientifically, economically and optimally without adversely affecting the environment and avoiding the activities which may lead to dooming of the fate of future generations. Every effort is also to be made to process the tapped resources within the State itself and to export the same in the form of final goods so as to bring about an improvement in the State's economy and to open up employment opportunities for the people. Across the board, the development of various skills required for meeting the demands and challenges of the changing socio-economic scenario is very low and this is one of the factors leading to unemployment among the youth. However, viewing on the State's economy as a whole, it is seen that the development strategy adopted so far in terms of creation and improvement of basic physical and social infrastructure has been successful.

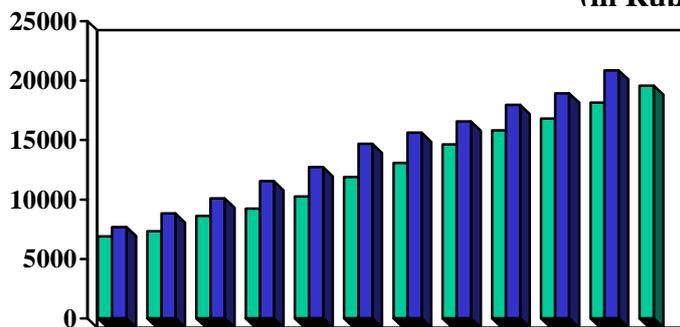
**1.6.2. State Income:** The Net State Domestic Product of the State at current prices increased from Rs. 2165.96 crores in 1997-98 to Rs. 4754.15 crores in 2004-05 and the corresponding per capita income increased from Rs. 10270 in 1997-98 to Rs. 19572 in 2004-05. The Net State Domestic Product of the State at constant (1993-94) prices was Rs. 1662.15 crores during 1997-98 and increased to Rs. 2739.50 crores during 2004-05. The per capita income (NSDP) at constant (1993-94) prices during 1997-98 was Rs. 7881 increased to Rs. 11278 during 2004-05.

### Per Capita NSDP/NNP

(at current prices)

#### Meghalaya & India

(in Rupees)



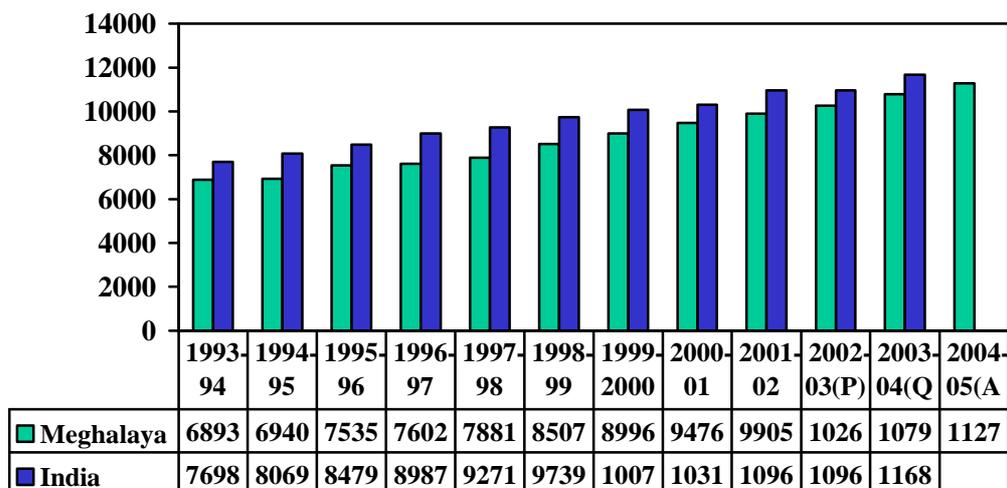
	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03(P)	2003-04(Q)	2004-05(Ad)
■ Meghalaya	6893	7347	8641	9243	10270	11914	13088	14632	15813	16803	18135	19572
■ All India	7698	8845	10103	11554	12729	14682	15625	16563	17947	18912	20860	

## Meghalaya & India

### Per Capita NSDP/NNP

(at constant prices)

(in Rupees)

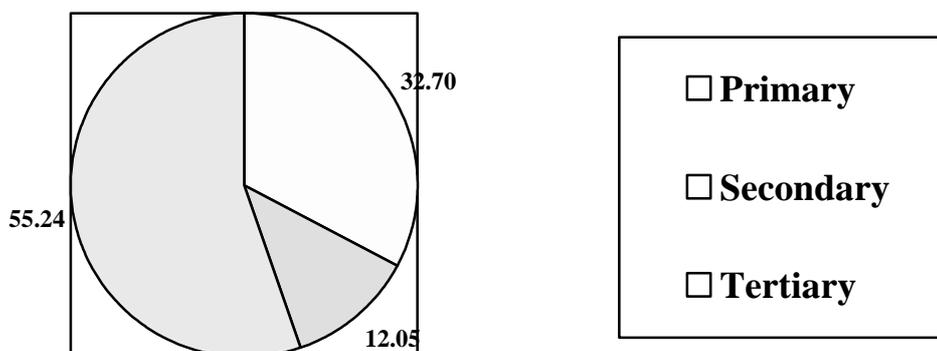


**1.6.3. Sectoral Income Distribution:** The estimates of Net Domestic Product of the State by main Sectoral origin reveal the role performed by each sector in the economy. Though the contribution of the Primary Sector did not decrease from one year to another, yet its share to the Net State Domestic Product at current prices is 32.30 % in 2004-05 (Advanced Estimates) as against 33.24 % in 1994-95. The Secondary Sector contributed between 11.89 % to 13.02 % to the Net State Domestic Product at current prices during the period of 1993-94 to 2004-05. The Tertiary Sector becomes the main contributor to the Net State Domestic Product at current prices and the share of this sector in the economy of the State ranges from 54.00 % at the lowest to 56.68 % at the highest during the same period.

### NSDP at current prices –2003-04 (Advanced Estimates)

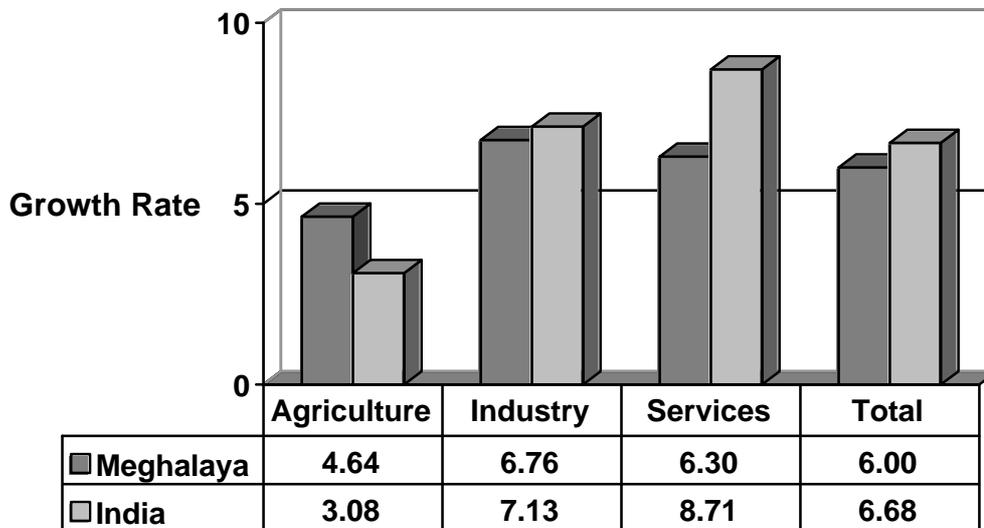
[Source: Dte. of Economics & Statistics, Govt. of Meghalaya]

### 1.7. DEVELOPMENT STATUS :

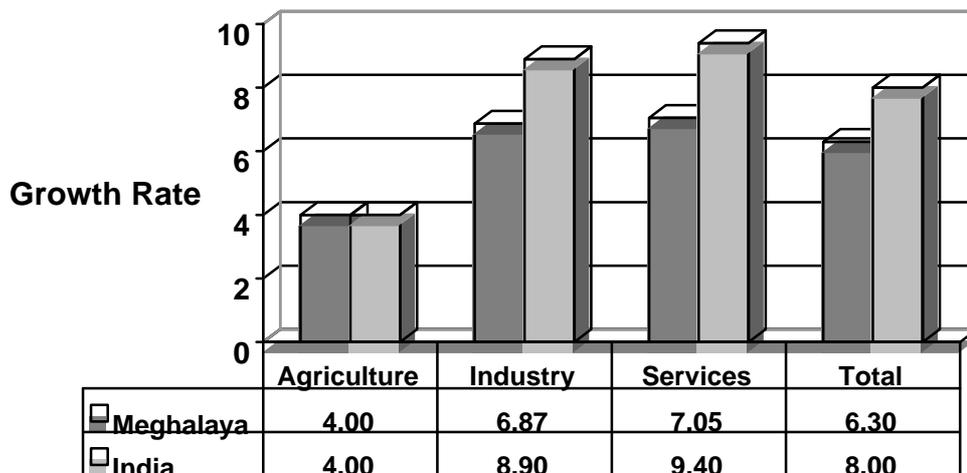


**1.7.1. Growth Rate:** The Tenth Five Year Plan document of the country as prepared by the Planning Commission envisaged an average growth target of 8 percent of Gross Domestic Product (GDP) of the nation during 2002-07. The Tenth Plan further emphasized that neither the growth target nor the objective indicators of well being of the people can be achieved simply by the quantum of resources that we may succeed to mobilize but by efficiency and effectiveness of our decisions, actions and implementation of our policies and programmes. The National Tenth Plan also recognize that economic growth cannot be the only objective of national planning but the development objectives should be specified in the broader sense of enhancement of human well-being. The growth target for the Gross State Domestic Product (GSDP) in the case of Meghalaya as assessed by the Planning Commission during the Tenth Plan period is 6.3 percent.

### Growth Performance (1993-94 to 1999-2000)



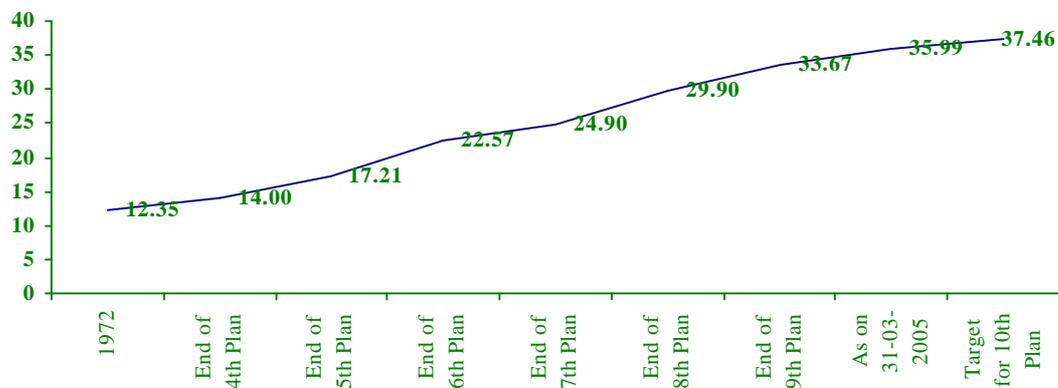
### Assessment of Growth Prospects during the Tenth Plan



**1.7.2 Infrastructure :** The overall position on the infrastructural development of the State has not reached the desired level that could ensure rapid socio-economic growth. The net irrigated area as on 2001-2002 is 23.8 percent only of the total cropped area of the State. The road density of 35.99 km./100 sq. km. (as on 31<sup>st</sup> March, 2005) is far below the national average of around 75 km/100 sq.kms.. The present level of installed generating capacity of power is 188.76 MW and the level of rural electrification is 56.93 per cent only. The Credit-Deposit Ratio is still at a low level of 37.03 percent as on June, 2005 although it has shown little improvement over the figure of 33.60 per cent as on June, 2004. As during

1998-99 the State had 4,679 Lower Primary Schools, 946 Upper Primary Schools, 493 High & Higher Secondary Schools, 7 Basic and Non-Basic Training Schools, one Teachers' Training College, 33 General Colleges and one University. The number of Polytechnics has increased from 1 in 1998-99 to 3 in 2004-2005. As on 31<sup>st</sup> March, 2004, the State has 7 functional Hospitals in urban areas with 1,562 beds, 22 functional Community Health Centres with 660 beds, 94 Primary Health Centres with 940 beds and 403 Health Sub-Centres without bed facilities. The total number of beds available in health care service in the Government sector is 3,162 and the bed : population ratio is 1 : 729. On average, there is one Primary Health Centre/Health care facility for a population of 24,533, one sub-Centre for 5,722 people, one doctor for 5,080 people and 137 beds per lakh of population. Much of the investments made in the health sector over the years has been in strengthening of the physical facilities/ infrastructure in terms of hospitals, CHCs, PHCs, housing for medical personnels, etc. In industrial matters, the number of registered manufacturing units during the year 2000-01 stood at 31 only while the number of registered small scale industrial units during the same year stood at 3,803. The number of registered vehicles during 2002-03 was 73,382 representing a population-vehicle ratio of 31.5.

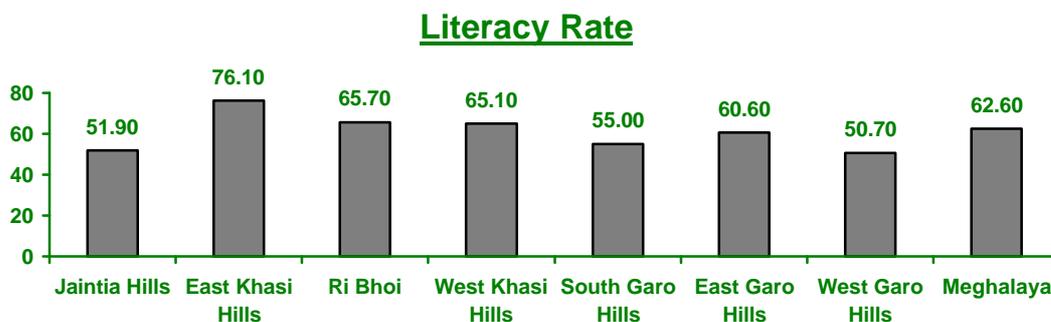
### Road Density (per 100 sq. Km.)



**1.7.3. Human Development:** Looking at the human development record of Meghalaya, there are many encouraging aspects of which the main element is the improvement in the educational attainments of the population. The number of children in Primary Schools was estimated to be around 1.48 lakhs in 1972 whereas the number in 2003-04 has increased to 3.84 lakhs. At the Upper primary level, the enrolment figure of 1.22 lakh in 2001-2002 has increased to 1.55 lakh during 2003-04. At the High school level, the intake of students has gone up from the base level of about 29,000 in the early 70's to well over 1.51 lakhs in 2002-03. The impact is seen from the increase in the State's literacy rate from 29.49

percent in 1971 census, to 34.08 percent in 1981 census, to 49.1 percent in 1991 census and to 62.6 percent in 2001. The literacy rate of 62.6 per cent as per Census, 2001 which is well below the national level of 65.38 per cent is unsatisfactory. East Khasi Hills District where the State capital of Meghalaya and the Headquarters of the North Eastern Council are seated has the highest literacy rate of 74.74 while West Garo Hills District in the western most part of the State has the lowest literacy rate of 50.78 percent. In the public health sector, accessibility to modern health care facilities has substantially improved and the number of Hospitals, Community Health Centres and Primary Health Centres has increased. The number of doctors has gone up from 130 in 1972 to 454 in 2004. There has also been a similar increase in the number of nurses and paramedical personnel. The impact of the investment in public health has been somewhat mixed with infant mortality rate continuing to be rather high at 60 per 1000 during 2003-04. The death rate and total birth rate were 9.2 per 1000 and 28.70 per 1000 respectively as per figures of 2001-02.

As against a total of 8,636 habitations, about 97 per cent i.e. 8,389 habitations have been fully covered for provision of potable water supply. However, out of these 76 habitations are iron affected habitations. The remaining 247 habitations include 235 partially covered habitations and 12 untouched habitations. About 50 per cent of the villages are connected with roads which are mostly fair weather roads. The per capita consumption of electricity during 2000-01 is about 250 KWh only. The level of villages electrification is 57 per cent up to March, 2004.



**1.7.4. Food grain production:** The net sown area constitutes 9.81 per cent of the total area of the State during 2001-02 and the double cropped areas constitute 16.85 per cent of the total area sown. Only 23.8 per cent of the total cropped area is under irrigation as per 2001-02 figure. Foodgrain production was 1.86 lakh tonnes in 1998-99 which increased to 2.24 lakh tonnes in 2001-2002 and 2.27 lakh tonnes in 2002-03.

**1.7.5. Industrialisation :** Though reasonable level of industrialisation is necessary for boosting up the economy of the State, yet, this has to take place along with the opening up

of employment opportunities to the local youth and improving the State's income by way of more revenue returns. Meghalaya has not witnessed the desired level of investment in this area mainly because of the lack of proper basic infrastructure, both physical and financial. In recent years, due to the package of incentives offered by the State Government combined with the attractive subsidies offered by the Central Government, a good number of industrial units have come up particularly at the EPIP at Byrnihat, Ri Bhoi District and as a result, there has been tremendous pressure on the supply of power, thus making Meghalaya a power deficit State. The real economic benefits being accrued to the State of Meghalaya as a consequence of these investments in industrial units are yet to be ascertained.

**1.7.6. Changing scenario :** The most notable change in the economic landscape is the rapid development of the road network in the State. Starting with less than 2000 kms. of roads in the early 70's, Meghalaya had 7691 kms. of roads as on 31st March, 2004. The investment on roads has produced a very positive impact on the economy and society in this Hills State. Hitherto, substantial parts of inaccessible areas have been integrated with the market economy. Correspondingly, the number of registered vehicles has increased from 3,831 in 1971-72 to 73,382 in 2002-03. With the improved road network and better access to interior areas, exploitation of forest and minerals in the State had seen some acceleration during the last two decades and it had produced mixed result. While exploitation of forests has been restricted by the Hon'ble Supreme Court, mining activities have intensified in recent years causing considerable environmental problems and significant strains on the road system. The development strategy during the past few decades has primarily aimed at significant strengthening of the techno-economic infra- structure and improving the delivery system for social services. The demand for agricultural produces has increased and the price incentive has made a positive impact on the agrarian sectors. The linking of interior areas to urban centres has enabled the farming community to gain ready access to fertilisers, pesticides and other inputs; it has also made it possible for the farmers to sell their produces in the growing townships within the State and outside. The impact of improved road communication is also discernable in the slow shift in the cropping pattern whereby Cash Crops and Plantation Crops have made a remarkable appearance on the agricultural scene in Meghalaya. In the coming years, the potential for developing of horticulture and plantation crops could transform the economy radically and provide large scale opportunities for employment and income in the rural sector. Moreover, the emergence of a literate population equipped with certain skills is beginning to change the age old mindset of the people.

The investment made in the past decades in raising the area under irrigation, soil conservation, land reclamation, etc., has also produced encouraging results. The agricultural extension machinery has been strengthened and marketing and storage infrastructure has been augmented. The utilisation of fertilizers, pesticides and other inputs has gone up over the years and rural electrification has also made some headway although at a considerable low pace due to economic reasons in recent years. While output in respect of foodgrains and other key groups has not shown any dramatic increase over the years, yet, what is unmistakable is the promise of overall enhanced production and productivity inherent in the vastly expanded infrastructure in agriculture, rural development and other sectors created during the last three decades. Now that the State has adequate technical manpower in certain disciplines, the coming years could see a fillip in the output of foodgrains, horticulture produces, etc., if the tempo of investment is stepped up.

**1.7.7. POWER SCENARIO IN MEGHALAYA :** As against the hydro power potential of around 35,000 MW in the North Eastern Region of India, Meghalaya have a potential of about 3000 MW of hydro electric power of which the tapped power potential is only 188.76 MW. The tapped potential constitutes only 6% of the available hydro power potential. The State of Meghalaya is directly influenced by the South-West Monsoon. The physical orientation and placement of the State with respect to the rain bearing monsoon winds has gifted Meghalaya with the wettest place on earth – Mawsynram and Cherrapunjee. The average annual rainfall of the State is 6000mm. The rain water flows down the rugged slopes and narrow valleys and descends rapidly to the plains of Assam in the North and Bangladesh in the South. Thus, the hilly terrains and the heavy rainfall have made Meghalaya a State ideal for harnessing hydro-electric power. Moreover, the hills of Meghalaya are blessed with a stable geology and of an older formation than the Himalayas. As a result, they are more stable and present less technical problems in the construction of dams, reservoirs, tunnels and water conducting system.

In the recent past, Meghalaya was a power surplus State, but with the industrialization process taking place, especially in the Byrnihat area, the State has recently become power deficit. There is an immediate need to provide an additional 150 MW of power for the pending industrial connections at Byrnihat alone and as such, the State requires to purchase this quantum of power from outside so as to cope with the pressing requirement. But, as it today, it is not practicable for the MeSEB to avail additional power from Ranganadi Project or to avail additional power from Kopili Project in view of the absence of 220 KV

D/C transmission line from Byrnihat to Misa covering a distance of 90 Kms. and from Khliehriat to Kopili covering a distance of 54 Kms. The State Government's proposal to plug this gap is still under consideration of the Ministry of DONER.

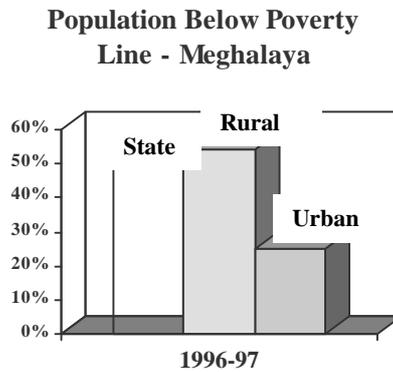
**The Myntdu-Leshka Hydro Electric Power Project Stage-I (2X 42 MW)** is a new project located in the Jaintia Hills District of Meghalaya. The Central Electricity Authority after scrutiny of Detailed Project Report and discussion with Me.S.E.B. officials have issued the techno economic clearance in September, 1999 at an estimated cost of Rs. 363.08 crores. The target time of completion of the project is 5 (five) years from the date of starting of the project. Implementation of this Project has started and it is targeted to be commission by the year 2007.

**Rural Electrification** : Out of the total number of 5,782 villages in the State, 2,762 of them have a population of less than 200. Though rural electrification in Meghalaya is not an economically viable activity, yet it is implemented from the social point of view. The Central and State Governments continued to give emphasis on this programme. The number of villages electrified as on September, 2004 is 3,292 which constitutes 56.93 % of the total number of villages in Meghalaya.

**1.7.8. Unemployment** : The number of educated unemployed youth in the Live Register of Employment Exchanges in the State as on August, 2004 is 36,234. However, this figure does not fully reflect the scale of unemployment in the State since it is most likely that a good number of the unemployed do not register themselves with the Employment Exchanges as they have little or no faith in the ability of these Exchanges to secure them employment. The increase in the number of students in higher educational institutions has not been accompanied by a matching increase in the number of employment opportunities, in the organised sector of the economy. In spite of the massive expansion in administration, the organised sector has not been able to absorb fully the additions to the literate labour force. Large number of school and college leaving persons are unable to secure regular salaried employment. The potential for self-employment needs to be explored even as private industry and trade. Rising numbers of educated unemployed have created frustration and anger among the youth which has probably contributed to unrest and tension in the region. During the Ninth and Tenth Plan a number of industrial units have come up in the State especially at Byrnihat and Barapani in Ri Bhoi District as a consequence of the State's incentives through its Industrial Policy of 1997, yet, the level of employment of local people in most of these units which is supposed to be 60 percent is far from satisfactory, perhaps due to lack of desired skill among the local youth or other unknown reasons. Development of local

entrepreneurship and evolution of self-employment opportunities continue to stagnate. Diversified skill development among the working population at the grass root level is almost non-existent. As such, inspite of unemployment in the State, many of the skilled labour required for construction of roads, bridges, buildings etc. continue to come from outside the State. This problem needs to be addressed. **One way of solving the problem of unemployment is by way of massive expansion of vocational training facilities in various trades at the grassroot level with emphasis on the youth after the 10 or 10+2 levels of studies. Possession of the desired skill would help the youth in finding self-employment opportunities or even in public and private enterprises.**

**1.7.9. POVERTY SCENARIO :** The National Tenth Plan document prepared by the Planning Commission indicates that the national percentage of population below the poverty



line has declined from 54.88 per cent in 1973-74 to 26.1 per cent in 1999-2000 which is expected to decline further to 19.34 per cent in 2006-07. In respect of the State of Meghalaya, the figures of the Planning Commission indicate that the percentage of population below the poverty line was 50.20 per cent in 1973-74 and 33.87 per cent in 1999-2000 which is expected to decline further to 31.14 per cent in 2006-07 with a B.P.L. population of 8.23 lakhs. The State Government does not have any reliable data in respect of population below the poverty line. However, as per statistics received from the State Food & Civil Supplies Department and the State Community & Rural Development Department, the percentage of population below poverty line during 1996-97 was 48.85 per cent of which 54.47 per cent is in respect of the rural areas and 25 per cent is in respect of the urban areas.

**1.7.10. Administrative Overhead Costs:** Given the hilly terrain and low density of population, administrative overhead costs in Meghalaya are bound to be much higher than those in the rest of the country. With the emergence of the new State, there have been efforts to bring the administration closer to the people by opening new districts, Sub-Divisions,

Development Blocks, etc. All development agencies have by now positioned their technical and administrative manpower. This process had resulted in massive expansion in the number of government employees both in the regulatory and development spheres. The administrative expansion was accompanied by a sustained rise in investments in government buildings, both for residential and office purposes. Building activities have generated employment opportunities for contractors, masons, carpenters and unskilled workers in a significant manner. The combined effect of the road building construction programmes on demand for labour and materials has been very substantial.