CHAPTER VII

SUMMARY AND CONCLUSION
For the socio-economic development of any region a number of factors which mostly operate in association with one another. The prime factors are the physical ones like natural physiographic condition of the land, availability of resources, level of technological knowledge, capital investment, socio-cultural traits of the people, etc. Besides, the development or the socio-economic well-being of the inhabitants has come to occupy a prominent and important place as far as the overall uplift of the people is concerned in a balanced way. For, no region is expected to come up in its economic conditions without the inhabitants being well cared and educated. It is with this that the present work has attempted to study the level of human resource development in the spatial context of Nagaland, not as an end but as a strategy for firming up the development process. In the study are included as a background, the physical setting, economic condition, population characteristics, etc. of the state under study. For the study of human resource development the prime indicators considered are per capita income, health attainment and educational attainment and their spatial distribution. The study of the aspects mentioned above is preceded by the statement of the problem of research and its objectives and significance. It is followed by the review of some relevant works to highlight the subject included in the study of human resources. Further, the physical settings, economic settings, accessibility network have been discussed before the study focuses on its main analytical work.
The Geology of Nagaland is bounded on the western part by the pre-Cambrian Mikir Hills Massif and tertiary shelf sediments of Assam plains, and on the northwest by the Brahmaputra plains through lineaments. The topography of Nagaland depicts a young mountain system that can be classified into four distinct ranges: (i) the Low Mountain Range, (ii) the Middle Mountain Range, (iii) the Patkai Mountain Range and (iv) the Barail Mountain Range System.

The major drainage systems in the state are Doyang, Dikhu that runs towards the west and flow into the Brahmaputra and the Tizu river system that flows towards the east and joins the Chindwin River in Myanmar. These rivers system form the territorial boundaries of different tribal groups in the state.

Nagaland has a typical Monsoon climate with variations from tropical to temperate conditions. According to the prevailing weather conditions, the year is divided into four characteristic seasons: (i) Cold season, (ii) Hot season, (iii) Rainy season and (iv) Cool dry season

The state consists of varieties of soils according to the topographical and geographical pattern of location. The soils of southern part of Nagaland mostly consist of high base status soils of humid regions, shallow black, brown soils.
Recently formed soils and alluvial soils are found in the west part and in the northern part of the state the soils are red loamy, red sandy and alluvial soils. The forest types found in the state are: (a) Sub-tropical moist deciduous forest, (b) Sub-tropical evergreen rainforest, (c) Temperate evergreen highland forest, (d) Coniferous forest and (e) Degraded growth.

The total length of roads in the state is around 8690 Km. The road development in Nagaland cannot be said as uniform due to environmental constraints such as hilly topography, rugged terrain, deep slopes, etc. This physiographic nature inevitably affects the degree of accessibility in the state. The hilly topography of Nagaland forbids development of railways. The main line of the North East Frontier Railway from Guwahati to Dibrugarh passes through Nagaland only in a small area having a station at Dimapur. Another railway line from Simulguri to Naginimora in Mon district was laid as a branch line of the North Eastern Frontier Railway. The only aerodrome in Nagaland is located at Dimapur. In 1970 the Nagaland postal division was created and headquarters was set up at Kohima. Telecommunication services in the state have made significant progress in the last decade, though it is still very inadequate. At present there are 326 post offices spread throughout the State. Mobile phone services have also been recently launched in the State.
The present economy of the state is basically dominated by the primary sector. It is particularly due to relative isolation, the adversities of terrain, inaccessibility to the rest of the world and non-availability of trained manpower. After the attainment of statehood in 1963, remarkable changes and development is taking place in all economic sectors. Participation of workers in different economic activities has also increased. Though, agriculture is the mainstay of the people of Nagaland gradually avenues of other means of living in the secondary and tertiary sectors of economic activities are opening up, decreasing the percentage of people dependent on agriculture. In most parts of the state the practice of jhum cultivation is still in existence. Terrace cultivation is also practiced mostly in the southern part of the state by Angami, Chakesang and Zeliangrong, etc, tribes. Recently, the Government of the state has expanded its activities by introducing tea, pulses, sugarcane, oilseeds and other cash-crops for cultivation. The potentiality for the cultivation of fruits, vegetables, species, plantation crops, medicinal and aromatic plants, flowers and mushrooms, etc in the state is great. Lately, the development of fisheries is making its impact on the economic scene of Nagaland. The state government is making tremendous efforts for the development of fishery sector. The state has already been brought under the mineral map of India. Coal and lime stones are now commercially extracted in the state. Building materials such as sandstone, slates, stream gravels and boulders are found in large quantities in the state. In the western part of Nagaland surveys have been conducted by the Assam Oil Company and the Oil and
Natural Gas Commission. It is revealed that this part holds good hydrocarbon prospects in the Champang area in Wokha district.

Nagaland is still in its infancy in the field of industry. Lack of raw materials, power, market, transport and technical labour are some factors that hinder the development of industries in the state. At present, few medium scale industries have been set up in the state. Even though the industrial landscape of Nagaland had only a few medium sized industries, the state abounds in cottage and small scale industries which are found in almost all the Naga villages.

The total population of Nagaland according to 2001 Census is 1,990,036 out of which male forms 1,047,141 and females 942,895. It is distributed over a geographical area of 16,579 Sq.Km. The state forms 0.19 per cent of the country’s total population. It occupies the 25th rank in population size amongst all the states and union territories in the country. The Schedule Tribe constitutes 89.14 per cent of the total population in the state. Thus, the composition of population in the state is almost entirely tribal. The population growth rate of 64.5 percent in the state during 1991-2001 is recorded as the highest growth rate amongst the states and union territories in the country which recorded an average of only 21.54 percent during the decade.
As per 2001 census, the state’s urban population is 342787 persons constituting 17.22 per cent of the total population. It is below the percentage of India which is 25.75. Wokha recorded the highest increase of urban population (161.77 per cent), while Mokokchung has the lowest increase of 25.84 per cent. In the state, the rural population constitutes 82.78 per cent. When the growth rate of rural population is measured amongst the districts, it is perceived that Tuensang (81.72 per cent), Wokha (81.11 per cent), and Mon (7.69 per cent) districts have registered the growth rate above that of the state. Kohima district has the lowest growth rate (13.74 per cent) amongst the districts in the state. The growth rate disparity amongst the districts shows that the population in the district has not uniformly increased.

In the state, the total number of migrants stood at 359457 in 2001 accounting for nearly 18.06 per cent of the total population as against 10.49 per cent in 1991. According to 2001 census, the total number of immigrants in Nagaland from the States and Union Territories of India and also from countries beyond India is 93534 persons constitutes for 4.7 per cent of the total population. Out of the total number of immigrants, 23.79 per cent are from other States of the country and the rest 2.22 per cent are from other countries. Dimapur district accommodates the largest number (130366 persons) or 36.26 per cent of the total migrants. The smallest number of immigrants is found in Phek district, the total number is 13370 persons constituting only 3.71 per cent of the total in the state.
As per the record in 2001 census, sex ratio in Nagaland is 900 females per 1,000 males as against the all India ratio of 933. Nagaland occupies the 6th position amongst the states in the North East India with respect to sex ratio on a descending order. Higher mortality rate of the females and the immigration of defense, paramilitary personnel, and bureaucrats and technocrats to various socio-economic services are the main reasons behind this phenomenon. It is observed that there is a wide spatial variation in the sex ratio in different parts of the state. The highest sex ratio is found in Zunheboto District (947). Other districts that display relatively high sex ratio above the state average include Wokha, Phek and Mokokchung with 927, 921 and 919 females per thousand males respectively.

As per the record in 2001 census, the percentage of main workers to total population in the state is 35.37. Amongst the different districts in the state the highest percentage of main workers to the total population is found in Mon District, while the lowest is in Dimapur District. When the proportion of workers in different economic sector is considered Tuensang District is found to have registered the highest percentage (95.36) engaged in Primary sector. Dimapur District (33.42 per cent) has the smallest proportion of workers in the primary sector. Nagaland being an agrarian society, most of the female workers is engaged in the process of agricultural production, contributing to the primacy of the primary sector. In 2001, 82.67 percent of the total population of female workers is engaged in the primary
economic activities in the state. Next to the primary sector is the tertiary sector which stands in the second place in absorbing the female work force in the state. The least proportion of female workers with only 2.01 percent of the total population of female workers is engaged in secondary economic activities in 2001.

Comparing between the proportion of young and old population in the state, it becomes evident that Nagaland with a high fertility rate, which is indicated by a large proportion of young age group is in the explosive second stage of the demographic transition, adding a large number of children every year. In each age group the proportion of male to total population is much higher than that of females. Compared to the mainland India the proportion of population below 15 years of age in Nagaland is relatively high, while India displays an average of 35.3 percent of population below 15 years of age in 2001; Nagaland recorded an average of 36.74 percent of the total population. The total dependency ratio in Nagaland in 2001 is 58.6 percent of the total population.

The interpretation of HRD and its thrust areas varies with the expert’s concept belonging to different disciplines. It has both quantitative and qualitative dimensions. Characteristics like the size, composition and distribution of population and labour force, the number of hours worked and the output and the earning per head etc are quantitatively measurable and the qualitative characteristics are
knowledge, skills, aptitudes, values, motivation, etc. The HRD is a process of improving, moulding, changing and developing the skills, knowledge, creative ability, aptitude, attitude, values and commitment etc, based on present and future job and organizational requirement.

Bogue and Biswajeet were the two scholars among the other scholars who have contributed well defined approaches HRD. Bogue put forward that human resources of a country or a region can be studied in two ways: - as a single areal universe and as a collection of sub-universe. The two approaches are complimentary, but the distributive approach which gives spatial patterns of human resources distributed in the country or a region, is more meaningful in geographic study. Biswajeet Pattanayak incorporated views of experts belonging to different disciplines and deduced nine approaches to HRD. The approaches are :- (i) Human Capital Approach, (ii) Social Psychological, (iii) Poverty Alleviation Approach, (iv) Queen Bee Approach, (v) Brahmanic Approach, (vi) Input Approach, (vii) Automation Approach, (viii) Motivational Approach and (ix) Creative Approach.

Most commonly used technique for measuring human resource development is composite indices constructed by the United Nations Development Programme (UNDP) to measure different aspects of human development. The indices are human development index (HDI, gender related development index (GDI), gender
empowerment measure (GEM) and the human poverty index (HPI). To measure the stage of human development in the state like literacy rate, life expectancy and per capita income were considered.

Nagaland has 66.6 per cent of literates according to 2001 census. It is higher than that of the country, which has 65.18 Per cent literates. Among the seven states of north east region the state of Nagaland ranks 4th position. The state high literacy rate is mainly due to the factors such as accelerated socio-economic development, government policy, and positive attitude of the people towards education. Amongst the districts and circles, Mokokchung district (75.39 per cent) and Lotsu circle in Wokha district (87.86 percent) recorded the highest literacy rate.

The per capita income of the State is Rs. 11,473 during 2000-01(at constant 1993-94 prices) as against Rs. 10,306 for the country as a whole. In the spatial context of the state, Dimapur district (Rs. 16837) occupies the highest rung of the income ladder and Mon with Rs. 4500 Per capita DDP has the lowest per capita income among the districts.

The state’s life expectancy is 73.4 years as against the national average of 60.7 years. Among the districts Mon (75.0 years) is above the rest Wokha (68.6 years) ranks the 8th position in the life expectancy years in the state. The life expectancy in
In the context of the process of globalization the people of Nagaland need to be empowered to decide and take initiative in improving their conditions by their own enterprise and hard work in accordance with their own perception of development in an equitable manner.

Nagaland is comparable with the range for developed countries which is due to Nagaland’s unique culture, social capital and dietary behaviour that provide the base for a healthy society.

Wide scope of tremendous technological advances particularly in information technology, formidable rise of transnational corporations, growing involvement of international economic agencies under the aegis of the UN is influencing the policies of member-nations. Rise in the proportion of contribution of international trade to the growth rate GNP of all nations, etc. promotes the spirit of globalization and the emergence of the global economy into which the economies of countries including India are integrated. The concept of globalization forms an essential element of the country’s (India) on going economic reforms programme which entails the processes of privatization, liberalization and letting the competitive market economy to operate freely. The main objective of the process of globalization is to achieve competitive efficiency for optimization of resource use at the global level.

In the context of the process of globalization the people of Nagaland need to be empowered to decide and take initiative in improving their conditions by their own enterprise and hard work in accordance with their own perception of development in an equitable manner.
The spatial pattern of human resource development in India reveals the existence of disparities in socio-economic conditions that is disaggregated by regions, gender, ethnic group or rural and urban areas within the country. And disparities of all kinds are interrelated and overlapping.

According to the Census of India -2001 the literacy rate is 65.33 percent (male 75.85% and female 54.16%). Kerala holds the first rank (90.92%) and it also holds the first rank in male literacy (92.20%) and female literacy (87.86%). Bihar has the lowest literacy rate (47.53%). Among the State and Union Territories of India, Nagaland holds the 16th rank in literacy rate and ranks 4th amongst the north eastern states of India.

The per capita net State domestic product (NSDP) of the States and Union Territories of India reveals a high degree of differences in per capita income amongst the state. The State of Goa with an income of Rs.18984 ranked first in per capita NSPD. On the other hand, Bihar with Rs. 3524 produces the lowest NSDP amongst the states in India. Among the different states of the country a large degree of disparity exist in the level of economic development in terms of NSDP. It can also be noted that with 75 per cent of the total number of states in the country
producing less than Rs.10000 NSDP reflects a low standard of living among the people in most of the states.

The HDI of Nagaland (0.623) compared to India (0.472) in 2001 is in a better position in the terms of overall economic development. The social framework of the Nagaland has placed education as a valued asset since its introduction along with the ushering of the Christianity. The unique framework of care and provision of Naga society finds expression in the better performance of the state, as against the national average, in the terms of longevity and health status. Among the districts in the state the HDI is highest in Dimapur (0.73); Mon district has the lowest HDI (0.45). The ranking of district is directly related to the position of district with DDP and with the educational attainments. This indicates a positive relationship between the income levels, the educational attainments and human development in the state. Tuensang and Mon districts are consistent underachievers in all the indicators of HDI in the state. The study of human resources is vital from the point of view of both economic and social welfare. Labour is highly perishable, which needs constant training for upgradation of information. If manpower is utilized optimally, certainly the state will grow rapidly. In Nagaland, agriculture is a leading sector, which generates more employment and this needs scientific training and temper. Education and health are to be spread meticulously and compulsorily to all. Profit, efficiency, productivity
and production are interdependent, which are positive and progressive, when human resources are skillful.

With a view to understanding the level of human resource development at the micro level, a survey has been carried out during the period 2004-05, covering 22 villages selecting two each from the eleven districts of the state. The aspects included in the study of the villages are their location, population characteristics, socio-economic conditions, etc.

Different type of cultivation does exist in the state. Terrace cultivation along with pisciculture is practiced Chozuba, Thenizumi, Nerhema, Kighwema, Saijang and ‘B’ Jalukie Villages, whereas wet rice cultivation is most extensively carried out in Lirmen, Old Ralan and Lothovi villages side by side with Jhuming. In the remaining villages however, jhuming over-shadows other forms of cultivation. Amongst the villages, Wakching with a population of 6412 is the most populous village and New Riphyim (844) is the least. As far as number of birth and death are concerned in the surveyed villages, Waromong village (95) has the highest number of births and Lothavi, singrep and Old Ralan has the lowest number of deaths where its is recorded as 3. The Molvom Village with a dependency rate of 49.92 has the highest economically dependent population which is closely followed by Anathonger village (44.72). This is due high birth rate and low mortality in the village. Whereas
Lumami village located in the interior of the state has the lowest dependency rate. Though the sex ratio in most of the villages is much above that of the state (900), Kigwema (1018) and Wakching (1006) village has an exceptionally high sex ratio. This can be attributed to the natural growth of more female population and to some extent the out-migration of male members to other places. On the other hand Chare (879) has the lowest sex ratio which is due to inter-marriage of the females with the other neighbouring villages and also due to out-migration to educational centers for higher education. In the health sector, Kigwema and Waromong have attained the highest health status. Each of them has a life expectancy of 76 years. Meanwhile, Yaong, Saijang, Chare and Old Ralan have the lowest life expectancy years of 70. The highest per capita income is enjoyed by Lothavi and Molvom village. Both the village is situated in Dimapur district. The high income of Rs. 16500 is due to the engagement in cash crop cultivation and pisciculture on commercial scale. On the contrary, Wangti village gets the lowest per capita income of Rs. 12700. In respect of literacy rate, Waromong stands out prominently with 89.10 per cent as literates.

After having discussed the geographical location, population characteristics including life expectancy and economic conditions, literacy, etc. of each of the villages, efforts have been made to find out human development index with the help of the relevant indicators. The indicators are (a) per capita income, (b) educational attainment and (c) health attainment. The indicators when examined for all the
villages it is found that variations do exist in per capita income, educational attainment and health attainment amongst the villages, particularly between the villages in the eastern and in the western part of the state. Pertaining to health attainment, Waromong village tops the index order (0.048). Yaong, Saijang, Chare, New Riphyim and Old Ralan villages, each with 0.043 are at the lowest rung of the ladder. In regard to per capita income the villages at the higher level are Lothavi and Molvom. Both the village shares the same index order (0.052). Yaong in Longleng District, Chozuba in Phek District and ‘B’ Jalukie in Peren District attain the lowest level (0.004) of per capita income. In educational attainment Waromong with 0.063 and New Riphyim with 0.061 stand out among other villages. The former is located in Mokokchung District while the latter is in Wokha District. Wangti, which is in Mon District occupies the lowest position with 0.030.

In terms of human development index (HDI), Waromong with 0.053 is above all others. Closely behind it are Kigwema, Nerhema and Lirmen. The index order for all these villages is 0.051. As far as human development is concerned, Yaong with 0.027 is at the bottom.

The overall study of society and its economy is presented as a backdrop which reveals the characteristics of underdevelopment. These are wide regional variations in the level of changes. Socio-economic development is obviously at a slower pace
in the eastern part of the state because of relative isolation, difficult terrain and relative inaccessibility.

The over-all scenario of human development in Nagaland remains far from satisfactory as it has failed to reduce wide-ranging disparities and provide the poor and disadvantaged groups equal opportunities. HRD has become all the more necessary for Nagaland which has been experiencing phenomenal growth of population during the last 60 years.

By the year 2015 all villages in the state should have electricity, road and internet connectivity, more schooling facilities, clean and uninterrupted water supply, etc. The State should become not only a leading player in information technology but must emerge as a regional gateway to south east Asia. It has also set a target of 8 percent growth per annum and double the per capita income by 2020.

Economic security can be enhanced by faster economic productivity with social justice and self-reliance. There is immense scope for change in work culture for raising productivity. It also needs upgradation of skills and promotion of skills/knowledge based professions. This certainly needs promotion of literacy to 100 per cent with more emphasis on female education for equalizing gender
inequalities. There is a good case for scientific manpower planning for harnessing the skills and energies of the million citizens of the state.

The public policies should be pro-poor and based on the principle of equity and social justice. Whatever policy is framed relating to development needs to be translated into action by expanding health, nutrition and medical facilities. Education has to be given top priority for achieving the set targets and in reducing poverty and population growth rate. In fact these basic elements are inter-linked and their improvement will raise levels of human development and quality of life, and strengthen the foundation of an egalitarian social order.