CHAPTER VIII

SUMMARY AND CONCLUSION
The main aspects on which the thrust of present work falls are the patterns of population characteristics, population composition, socio-economic composition, population structure and composition at the micro level and the socio-economic implication of population dynamics in the state of Nagaland. The study of all those aspects 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 themes included in the study of population geography. Further, the physical settings, economic settings, accessibility network of the state and the historical perspective of the peopling have been discussed before the study focuses on its main analytical work.

Except some plain expanses adjoining the plains of Assam in the west, Nagaland is marked by high hill ranges ranging from 110 meters to 3840 meters above mean sea level. The physiography of the state can be divided into three sub-groups, viz.

(1) Eastern low range

(2) Middle hilly range

(3) Eastern mountainous region.

The western low range which rises from the plains of Assam in the western part of the state has comparatively lower elevation than the other two. Ghaspani, Bhandari, Merapani, Tira are some important valleys in this division. The middle hilly range has an altitude of around 600 to 1200 meters above mean sea level. This range runs through the middle of the state from north-east to south-west direction. The eastern
mountainous range has an altitude of around 1200 meters to 2400 meters above mean sea level. The highest peak in Nagaland i.e. Saramati with 3826 meters above sea level is located in this range. This range forms the great watershed between Myanmar and Nagaland.

The important rivers in the state are Doyang, Dikhu, Dhansiri and Tizu rivers. Excepting Tizu all other rivers flow into Bramaputra in the plain of Assam. Tizu, on the other hand flows into Chindwin river system in Myanmar in the eastern part of the state.

The climate of Nagaland falls under the sub-tropical to temperate type with minor local variations. Four distinct seasons in the state are:

(1) Winter (Dec- Feb),

(2) Pre-monsoon (Mar-April),

(3) Monsoon (May-Sept) and

(4) Retreating monsoon (Oct-Nov).

Soil cover in the state is thin except in the valleys and along the foot hills. Soils of Nagaland can be broadly grouped into:

(1) Alluvial soils and

(2) Residual soil.

The Sub-groups of the former are:

a. Recent alluvium,

b. Old alluvium,
The main forest types that are found in the state are:

a. Sub-tropical moist deciduous forest,

b. Sub-tropical evergreen rain forest,

c. Temperate evergreen highland forest,

d. Coniferous forest and

e. Degraded growth (on Jhumland).

Agriculture is the dominant economy of the state. Majority of the population are dependent on it. Though terrace cultivation is practiced by some tribal groups like Angami and Chakhesang, it is the shifting cultivation that dominates the agricultural pattern in the state.

Industrially, Nagaland lacks behind and is still at the bottom of its development. In respect of household and cottage industries the state is well advanced. In almost all the villages there are cottage industries like weaving, bamboo and cane works, wood carving, blacksmithing, etc.

Coal occupies an important place in terms of the availability of mineral resources in the state. It occurs at Janji and Desai valley aside from Nazira coal field in the
western part of the state. Mineral reserves are also found in the eastern part of the state, though proper exploitation is yet to be carried out.

Transport and communication network in the state is not well-developed as compared to other neighboring states. However, after attainment of statehood progress has been made in this sphere. At present there is one aerodrome and one railway station located in Dimapur town. Besides, there are road networks connecting all the districts headquarters as well as villages to its administrative centers. The development of transport and communication in recent years has tremendously shortened the social distance among the people.

Though there are no authentic historical records as to how and when the Nagas started settling in Nagaland, it is generally accepted on the basis of oral evidences that the Nagas came to Nagaland in different waves of migration. After they entered they settled in different parts of the state and lived independently until they were taken into the fold of British India Administration. Impact of Britishers and their administration upon the social life of the Nagas is enormous. Life style of the people began to change and thus changes took place in every social as well as economic life due to exposure and influence of modern civilization.

When the growth of population is viewed it is found that Nagaland is growing at a fast rate in numerical strength. This is due to high natural growth rate and the inflow of migrants from other parts of the country. The growth rate of 56.08 and 64.5 percent during the 1981-1991 and 1991-2001 is recorded highest amongst the states.
in the country. If this growth rate continues the population of the state would be
around 3274098 persons in 2011. Among the districts, Wokha district (95.15
percent) recorded the highest growth rate during 1991-2001 while Kohima recorded
the lowest (19.99 percent) during the same decade.

Nearly 82.77 percent (2001 census) of the total population of the state inhabits in
rural areas. Among the districts the highest growth rate in rural population is
recorded in Tuensang district. In spite of less proportion to total population in
Nagaland, urban population registered a high growth rate of 64.62 percent during
1991 to 2001. Wokha registered the highest growth rate of urban population in the
state.

The study of migrant population indicates a high proportion of migrants in the total
population of the state (18.16 percent). Of the total migrants, 23.79 percent are from
other states of the country, 73.97 percent are migrants within the state and 2.22
percent are from other countries beyond India. The proportion of female migration
is also large which indicates the wider social interactions among the people. This
has been due to improvement of transport and communication network and the
influence of education.

Altitude wise distribution of population shows around 75.06 percent of the total
population in 2001 is found settled in the altitude ranging from 600 meters to 1800
meters. Whereas, the share of population in the low lying areas is only 14.14
percent. The rest is found at the higher altitude above 1800 meters above mean sea level.

The average density of population in the state is only 120 persons per sq km as compared to 324 persons per sq km in the country in 2001. Spatially, the density of population in the circles located in the foothills of the western part of the state is high. It is 200 to 700 persons per Sq km in the circles like Dimapur Sardar, Niuland and Chumukedima. While circles like Phokhungri, Nsong, Champang, etc have a very low density.

Sex ratio in the state is declining from 999 females per 1000 males in 1951 to 900 females per 1000 males in 2001. Imbalance in sex ratio is mainly due to the increase in number of male migrants from outside the state. At the district level Zunheboto (947 females per 1000 males) recorded the highest; while, Dimapur (85 females per 1000 males) recorded the lowest.

The study of the age structure as per 2001 census shows that a comparatively high percentage (36.74 percent) of the total population falls under the age group of 0-14. This speaks of low infant mortality rate in the state. Only about 4.53 percent of the total population is under the category of adult population (above 60 years). It is evident that Nagaland with a high fertility rate is in the explosive stage of demographic transition adding large number of children every year.

Nagaland being a Christian dominated state the percentage of Christian is 89.96 percent of the total population. The Christians are followed distantly by the Hindus.
(7.69 percent) and Muslim (1.75 percent) respectively. Other religious groups Jainism, Sikhism, Buddhism, etc which have 0.57 percent of total population.

The working population in the state forms 35.37 percent of the total population. The high percentage of working force as compared to that of the neighboring states is primarily due to the practice of Jhuming which involves active participation of both male and female workers. The percentage of workers in primary sectors is around 68.40 percent; whereas, those of secondary and tertiary sectors comprise only 2.57 percent and 29.03 percent of the total main workers respectively. The spatial distribution of workers in the state reveals that the highest percentage of the primary workers is in Tuensang district (95.36 percent) while Mokokchung and Dimapur district has the highest secondary and tertiary workers of 3.35 percent and 63.49 percent respectively. Mon district on the other hand has the lowest secondary workers (1.68 percent) and Tuensang district has the lowest tertiary workers (2.34 percent).

The highest percentage of main workers in urban area is recorded in Phek district (37.77 percent), followed by Kohima (30.32 percent). Wokha district with 20.07 percent has the lowest proportion. Due to the prevalence of Jhuming and the economic backwardness of the state the proportion of female participation in work force is high (29.06 percent). About 82.67 percent of the female main workers are engaged in primary sector, 2.01 percent in secondary sector, and 15.32 percent in the tertiary sector.
Mon district has the highest percentage of female workers (37.18 percent) while Dimapur district has the lowest (12.02 percent). With the exception of Dimapur district, other districts have a large proportion of female workers engaged in primary economic activities which is more than 70 percent of the total female workers in each districts respectively. Dimapur district has the highest percentage of female workers engaged in secondary and tertiary economic activities, 4.55 percent and 47.83 percent respectively.

In the circle level only around 20 out of 93 circles records a working force above 40 percent of the total circles population in 2001. The remaining recorded a negative trend in work participation revealing a high dependency ratio. Amongst the circles, Monyakshu and Panso circles in Mon district recorded the highest percentage of workers of 53.78 and 52.89 percent of the total population in the circle respectively.

Compared to other states in the country the literacy rate in Nagaland is high, the proportion being 66.6 percent of the total population (excluding population below 7 years) in 2001, ranking fourth amongst the states in the North-Eastern region of India, the first being Mizoram. Female lacks behind males in literacy rate in the state, while male literacy recorded a high of 61.31 percent of total male population, female recorded only 52.19 percent of its total population. Regionally, Mokokchung district with 75.39 percent occupies the first rank among the districts, followed by Wokha (69.59 percent). Mon district with only 35.57 percent occupies the lowest position among the districts in 2001. When considered at the circle level a wide
variation is seen, Lotsu circle in Wokha district has recorded the highest i.e. 87.86 percent of its population; whereas, Monyakshu in Mon district has only 13.17 percent literate population. Further, sharp differences can also be seen between the literacy rates of rural and urban areas of the state. While, 84.7 percent is recorded in the urban areas, only 62.8 percent is recorded in the rural areas in 2001. Mokokchung district occupies the highest rural and urban literacy rate among the district. On the other hand, Mon district has the lowest literacy rate in both the rural and urban areas in the state.

The growth of urban population has been a continuous trend which may be attributed to the increase in magnitude of rural to urban migration to a large extent. The proportion of urban population during the year 1951 was only 1.94 percent of the total population of the state; however, the growth of urban population becomes more significant when we look into the proportion of urban population (17.22 percent) in 2001. In 2001 Nagaland have nine urban centers of which two towns come under the category of class II towns, four towns under class III towns and three towns under class IV. Regionally, Dimapur district has the largest proportion of urban dwellers (37.08 percent), followed by Kohima (24.84 percent) and Wokha (15.66 percent). Mon district has the lowest proportion (6.36 percent).

While considering the micro-regional analysis of two urban centers and four rural villages, there are certain similarities as well as differences that exist in their socio-economic and population characteristics. In between the two urban centers there is a
large difference in the growth of population, migration rate, density, literacy, etc. While Dimapur has rapid growth rate, heavy migration rate as well as more density compared the Mokokchung. Mokokchung with less population however, has less dependency rate and has more percentage of literacy rate and higher educational level. In the socio-economic sphere Mokokchung has a higher percentage of workers in tertiary sector and agricultural sector. Dimapur has more proportion of its workers in secondary and industrial sector. This implies that the advancement in industries and production centers as well as in commerce is more pronounced in Dimapur.

Among the villages under study Alisopur has the highest growth rate of population while Kikruma recorded the lowest. High sex ratio (above state average) is prevalent in almost all the villages. The highest proportion of dependent population is found in Alisopur while Waromung has the lowest. Further, sharp differences exist in terms of literacy among the four villages, while a high literacy rate exist in Waromung the remaining three villages exhibit a very low proportion of literate population. Since, in all the rural areas agriculture is the mainstay of the people in the state, the four villages are no exception where more than 70 percent of the total village population are engaged in agricultural activities. Excepting Viswema village where 23.51 percent of the total main workers is engaged in tertiary activities, in all the remaining three villages the proportion of workers in this economic sector is low.
Further, in all the villages the share of workers in secondary economic sector is insignificant.

From the above studies and discussions the following observations can be made relating to the aspects of the present work:

1. Since the last three decades, the population of the state has been growing at an accelerated rate. If the present trend continues in the state where the resources are limited the state will definitely face socio-economic problems in the near future.

2. High birth rate accompanied by relatively low death rate has resulted into high natural growth rate in the state.

3. The number of migrants in the state is progressively growing over the years, causing a significant change in the demographic pattern of the state. The pressure put by the migrants on the socio-economic life of the state is also noticeable in many ways.

4. It is noticeable that in recent decades the internal movement of people is fast growing in number, particularly from the rural areas to the urban centers. This reflects a marked change in the socio-economic and cultural outlook of the people.

5. The sharp decline of sex ratio over the past few decades indicates an adverse behavior upon the qualities of population. This in due course of time is likely to create major imbalances in the socio-cultural milieu of the people.
6. Nagaland with a large proportion of dependent population is going through a high level of constraint. Such constraints would push the economy of the state to a stagnation level.

7. The widespread practice of Jhum cultivation indicates the dominance of agriculture upon the economy of the state. It reflects the occupational pattern of the population in which agriculture and allied services still acts as the key source of employment.

8. Lack of proper infrastructure in the industrial sector is one of the major factors that hinder the occupational shifting from agriculture to non-agricultural activities.

9. Although the literacy rate in the state is growing rapidly, yet there is a wide difference in the literacy rate between different regions in the state. Districts like Tuensang, Mon in the north and eastern part of the state have very low literacy rate as compared to that of other districts. Similarly, the sex disparity in literacy is also more prominent in those districts having low literacy rate.

10. It is observed that the population of the urban centers is growing in an accelerated rate, particularly in the towns located in the western plains of the state. This growth is triggered by many factors as discussed earlier and if this trend continues with no proper planning, problems relating to environment management will mount and aggravate the situation.
11. The state is almost at the bottom layer in the sphere of socio-economic development in the country. However, marked differences in the level of development among the districts are also found within the state. The districts situated in the eastern and north eastern part of the state are backward both socially and economically.

In the light of the observations made above, certain suggestions as well as policy options are being put forward for the improvement of the socio-economic environment and for maintaining the growth of population at a manageable level.

1. A comprehensive policy has to be developed to address the demographic challenge that the state faces today. Sustained efforts are required to bring down the current fertility rate to a population stability level. Education on the necessity to maintain small size-family should be imparted by encouraging the people to resort to various appropriate family planning measures. On the other hand, proper planning should be adopted to check the immigration of outsiders and their influence on the demographic structure and socio-economic character of the state.

2. Promote vigorously the small family norms and the delayed marriage for girls.

3. Encourage much greater role of males in family planning and population stabilization.
4. The state should adopt a state population policy through the State Population Council, so that population stabilization may be taken up as a mission.

5. All the analysis clearly points to a need for population-related policy to minimize the adverse impact of demographic changes on economic and social development.

6. Female education should have priority since it has a relationship to fertility and family size norms.

7. To enhance the development of economy in the state; immediate steps should be undertaken towards shifting of population from the primary sector to the secondary and tertiary sectors. Small-scale industries based on available resources need to be developed in all parts of the state. Large-scale industries which are the basis of economic development should be established which would lead to the advancement in economy of the state.

8. In view of the increasing pressure on natural resources and environment due to excessive Jhuming and rapid urbanization, policies in favour of population controls, environment conservation and sustainable development should be adopted in the state.

9. Gender sensitization should be encouraged at the strategic planning level, so that the involvement of women in the socio-economic development processes is ensured. That would raise the living standard of the people and improve the level of economy.
10. Planning for economic growth must be reshaped for a more sectoral balance and more equitable income distribution. Policies aiming at broad based rural development and urban employment should be adopted primarily. Rural development should be promoted side by side with urban development at both the state and sectoral level.

11. The state should adopt policies to improve human resources development. Programmes especially vocational training in rural and urban areas to open a wider range of employment options and to contain the unemployment problems should be implemented.

12. Even though the literacy rate in the state is high compared to other state in the country, the attainment of educational level is still far from satisfactory. Hence, to boost the educational level efforts should be made to set up higher technical and scientific institutions which are still conspicuous by their absence in the state.

13. Since education is the key factor for women in the development process of economy and population stabilization, focus should be directed towards the increase of female literacy rate in order to bridge the gap between male and female literacy rate.

14. Any planning for development of economic as well as population stabilization needs proper focuses on eradication of disparity between different regions of the state. It is imperative in a state like Nagaland where complexities among
different social groups particularly between the eastern and western region exist. Failure to bring the underdeveloped region at par with developed regions would hinder the endeavor to achieve unity and social integration among the people. Therefore, while efforts are made for the development of socio-economic condition of the state priority should be given to remove the disparity among the different regions and social groups through proper planning.

15. Lastly, all population-related policies and programmes require financial resources and these can be generated more easily in a growing economy. Therefore, it is essential that policies promoting broad-based economic growth should be vigorously pursued.

Since the present study only endeavors to expose the pattern of population structure and composition as well as the economic implication of population dynamics, enough suggestions and policies have not been laid out in detail. There is therefore, enough scope for improvement upon the present work, which will require further research and detailed micro level study of the state. It is hoped that apart from academic realm the present study would provide basic material towards population planning in the state.