

**PATTERNS OF CHANGE IN POPULATION AND ITS IMPACT ON SOCIO- ECONOMIC
DEVELOPMENT IN MOKOKCHUNG DISTRICT, NAGALAND**

**Thesis submitted to Nagaland University
in Fulfillment of the Requirements
for the Degree of
DOCTOR OF PHILOSOPHY
In
Geography**



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CERTIFICATE

This is to certify that the thesis submitted by Ms. Mejarenla Longchar towards the degree of Doctor of Philosophy (Ph.D.) in the Department of Geography title **“Patterns of change in population and its impact on socio-economic development in Mokokchung district, Nagaland”** embodies the result of her own work. To the best of my knowledge the data and facts recorded in the study are based on her own research work.

I, therefore, recommended that this thesis may place before the examiners for evaluation for the award of the Ph.D of this university.

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Declaration

I, Ms. Mejarenla Longchar, do hereby declare that this thesis entitled “ **Patterns of change in population and its impact on socio-economic development in Mokokchung district, Nagaland**”, submitted for the award of the Degree of Doctor of Philosophy in Geography comprises the results of my own research work carried out in the Department of Geography, Nagaland University. The contents of this thesis did not form basis of the award of any previous degree to me or to the best of my knowledge to anybody else and that the thesis has not been submitted by me for any research degree in any other university.

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Chapter I

Introduction

1.1 Introduction

Demography is the statistical study of human population and it encompasses the study of the size, structure and distribution in spatial and temporal changes in them in response to birth, death, migration and aging.

The important concepts of demography are:

(i) the crude birth rate,(ii) the general fertility rate,(iii) the age-specific fertility,(iv) the crude death rate,(v) the infant mortality rate,(vi) the expectation of life,(vii) the total fertility rate,(viii) the gross reproduction rate,(ix)the net reproduction ratio.

It is through these concepts that study and analyze the changing patterns in population. According to Alfred Marshall, ‘the most valuable of all capital is that invested in human beings’.

The U.N. Population division expects the absolute number of infants and toddlers in the world to begin to fall by 2015, and number of children under 15 by 2025, working independently, demographers at the International Institute for Applied Systems Analysis in Austria expect world population to peak at 9 billion by 2070 throughout the 21st Century, the average age of the population is likely to continue to rise.

According to what could be called the demographic-socio-economic argument, developing countries are likely to enhance their prospect for economic development if their population growth slows. As national populations move towards replacement-level fertility, both Govt. and families

should improve their capacities to invest in the health of each child, the education of each student and the output of each worker.

The best testimony in its favor comes from the emerging powers of east and South East Asia: South Korea, Taiwan, Thailand and Singapore (each below replacement fertility) and following close behind them, Malaysia and Indonesia. In each of these countries, policies and programs favoring greater access to voluntary family planning began in the 1960s, ultimately contributing to smaller family size and a reduction in the proportion of children relative to working age adults. In each, fertility to decline coincided with or preceded a transition growth in economic productivity.

At one time or another, economists have suspected that population dynamics influence economic growth, employment and poverty and the management of assets. The three principal categories of issues are

- (i) Physical: - Human-built infrastructure related to economic activity.
- (ii) Natural: - Natural resources and the services they provide including waste material and energy cycling.
- (iii) Human: - Health and educational states of citizens.

Studies of a single country often produce valuable insights, but it can be hazardous to generalize by applying the lessons learned from other countries. The problem of generalization is solved where strong patterns of population-related impact emerged from multi-country comparisons. However, such patterns are hard to discern among variations in data quality,

history, culture, geography and shock related to political events or natural disaster. The study of population, changes and patterns and its impact in socio-economic development will help in understanding the needs and importance of all round development in the society.

1.2 Objectives

The following are the objectives of the study:

- (i) To examine the relationship between population growth and economic development.
- (ii) To study the growth of population through the process of fertility, mortality and migration.
- (iii) To study the status of urbanization with reference to demography, economic, environment, infrastructure, aesthetics and cultural aspects.
- (iv) To evaluate an economic perspective on population growth and the assumption that underlines various views over the past decades.
- (v) To understand the impacts of public reforms in spatially-differentiated context; agricultural household-firms and poverty.
- (vi) To focus on the spatial analysis and adjust to economic-social-environmental change and policy reforms.
- (vii) To investigate the process of demographic transition.

(viii) To provide strategies, priorities and remedial measures to the growth of population and economic development.

1.3 Hypothesis

1. The dependence on family members for cheap labor has led to increase in high birth rate.
2. The absence of job avenues stagnates the economic development.
3. The influx of migrants from villages and other states has led to high growth of population affecting the overall socio-economic well being of the town adversely.
4. The development of agricultural and cottage industries has given some incentives to the educated unemployed to improve their skill and earn their livelihood.

1.4 Data Based and Methodology

The study is based on the data information collected from the various secondary and primary sources. The secondary data could be collected from a variety of authentic government sources available in published form and also from files of government offices. As far as possible, related academic works were consulted. In cases where requisite data are not existing or missing from official records, data from the closest year were used.

The primary data have been collected from the fields through direct interviews, conducting a sample survey. This could be supplemented by the outcome or the discussion and interviews with elders in towns and villages.

Both the deductive and inductive method is being considered in the research work. Various arithmetic, cartographic and statistical method have been used for indicating emergence in growth of the urban centre. Demographic structure, price index of market., functional characteristics, occupational structure, flow diagram for inflow of vehicular transportation indicating influx of social and pyramids for indicating growth, age and workforce are being analyzed.

1.5 Study Area

Mokokchung is one of the eleven districts in Nagaland and it became a full-fledged district in 1957. It covers an area of 1615 Sq.kms and is situated in the North-western part of Nagaland state; the district lies between $93^{\circ}20'E$ and $95^{\circ}15' E$ and Latitude between $25^{\circ}6'$ and $27^{\circ}4' N$ (Fig.1.1). It is bounded by Tuensang district on the east, North Sibsagar and Jorhat districts of Assam (Map1) on the west and Wokha and Zunheboto districts on the south(Map2) The district is divided into six (6) Ranges, namely - Ongpangkong, Langpangkong, Asetkong, Changkikong, Japukong and Tsurangkong with a total population of 1,93,171 (2011 census) which is a decreased of -16.77% from 2001 census.

The district is blessed with important rivers and streams like Milak, Dikhu, Tsurang or Dessai, Tzumok and Menung.

1.6 Statement of the Problem

Nagaland the 16th state of Indian Union, with a population of nearly two million people lies at the Longitude between 93°20'E and 95°15' E and Latitude between 25°6' and 27°4' N, and a total area of 16,579 km is borders by the state of Assam to the West, Arunachal Pradesh and part of Assam to the North, Myanmar to the east and Manipur to the South. It is one of the smallest states of India. It is largely a hilly state and rich in flora and fauna and about one-sixth is under the cover of tropical and sub-tropical evergreen forests. It enjoyed monsoon type of climate with high humidity levels.

Nagaland is a land of tribes. Tribes and clan traditions and loyalties play an important part in the life of Nagas. Nagas are noted for artisan activities like weaving, handicraft and bamboo works. More than 80% of the people live in rural areas, and agriculture is the most important economic activity with more than 90% of the population employed in this field. The dependence on family members for agricultural labors has made Nagaland one of the highest growths in population density. The decadal growth rate of the state is 64.53% (against 21.54% for the country) and the population of the state continues to grow at a much faster rate than the national rate. The state

has population density of 120 per sq.km as against the national average of 324 (2001 census)

Nagaland lying at with its rugged topography, and high terrain did not allow the development of industries even though it has rich natural resources. In the last few decades, Nagaland has witness high growth of population that has affected the growth of economic development in all fields. Mokokchung, which is one of the major towns of Nagaland, has witness the growth of population from the last few decades that has drastically affected the socio-economy of the town. It is also the most advanced district of Nagaland comparing to the other districts of the state. It is one of the four major urban agglomeration areas with the population of 60,161 (2001 census).

Mokokchung is a tribal district and is home of the Aos with the population of 232,085 persons (2001 census) comprising 102 villages (2001 census) and lies at the Latitude 26 20' 00" and Longitude is 94 32' 00". But the last few decades, people of different races are found, due to immigration and emigration. Marwaris, Biharis, Nepalese, Southern Indians, Bangladeshis and other tribes of Nagaland are settled in the main urban centre of Mokokchung. These migrants from other states of India came to Mokokchung mainly for Business and the other Naga tribes for the Government jobs in the district. Mokokchung has seen less changes in the growth of population thereby changes in economic development, it has

receives high rate of migrants from Assam and other neighboring states thus transforming the social status of the inhabitants.

Concentration of population in the Mokokchung town makes it one of the most developed districts in Nagaland. Most of the people are educated and hold various jobs, both in government as well as in private sectors. Various sectors such as cottage, handicraft, and handloom, agricultural and private industries have been set up. Most of the business establishments are set up in the town are mainly due to the transport linkage with other states. It is because of the transportation and communication that both legal as well as illegal migrants could arrive to the town to set up their business establishments.

Population explosion affects the course of national as well as state socio-economic development. Even though there is no clear evidence between the linkage of population and socio-economic dynamics, on average, population growth dampened the growth of per capita gross domestic product, the primary measuring unit of economic growth.

The indepth study of population growth and its patterns of change are important to understand the rapid changes in socio-economic development. This study will help in understanding the impacts felt on the district of Mokokchung.

1.7 Review of Literature

'The Global Impact of Demographic Change', (Batini Nicoleta, et al, 2006) examines the implications of such demographic transition over the next 80 years for Japan, the United States and other industrial countries, and the developing region of the world using a dynamic intertemporal general equilibrium for country model containing demographics calibrated to the 'modern variant' of the United Nations Population Projection. Demographic change will also affect saving, investment, and capital flow, implying changes in global trade balances and asset prices. (Hazarika, Joysankar, 1998) aims to formulate a regional geo-political framework based on neo-geo-political ideas, and tries to examine the correlations between geography, economic resources, ethnicity and politics in his book *Geopolitics of North east India*.

Development and Population Displacement, (Cernea M.Michael 2004), study on how development programs, both large and small, frequently cause population resettlement, voluntary or involuntary population displacement, both economic and physical, and on post displacement resettlement and reconstruction. (Cox, R. Peter 1976), study on *Demography* is based on the concept that is useful for demographic analysis including significant events in life and types of statistical data, which are collected, published and used. It then describes the various kinds of changes, which can occur, and the underlying causes-social, economic and political. The history

of population growth and development, resources availability for the support of mankind and their relationship with living standards are explored.

Dynamics of Gender Planning and Population (**Datta, K.B**,2002) deals with the rapid phenomenal changes in conditions of women; sex imbalances, increasing number of widows, complex working condition, socio-psychological and economic exploitation of females, sexual abuse and discrimination on sex ground. Etc. (**Bhatia, B.S and Batra, G.S**, 2003) in '*Human Resource Development*' deals with the survival of business organizations in the post liberalization era of change and uncertainty that will to a large extend depend on the performance of their human resource. This book deals with human resource development, keeping in view the global business challenges, growing complexity of the business and increased competition. Human resource management has become one of the most important parts of the policy framework of any corporate enterprise. The book is an attempt to understand the various resource emerging issues in the area of human resource management.

'Migration Settlement and Ethnic Associations' (**Kumaran, K.P**, 1992) seeks to understand the role of ethnic associations in the process of Indian urbanization. In so doing efforts have also been made to evaluate the changes brought about in the structure and function of ethnic associations. (**Sarkar Debarati**,2006) paper, '*The Relationship between Fertility and Socio-Economic development in Selected States of India*' focuses on issues relating to fertility and related socio-economic development observed

differentials between different states, as determined by different socio-economic development indicators. In this analysis he tried to find out the relationship between fertility and development using district level data from census of 1991 and 2001 through panel data regression. Also to see if there are any district specific affects influence on fertility. (**Goswami, Homeswar,** 1985), book on '*Population trends in the Brahmaputra Valley*' fills up the gaps in the population statistics of Assam, particularly in the field of fertility, mortality and migration rates. The work is methodologically oriented and offers estimates of the population parameters with the aid of appropriate growth curves and other statistical tools and techniques. The links of population events with the socio-cultural milieu of Assam in an historical perspective have been adequately probed by the author.

(**Gallup.L.John,** 2000, *Geography and Socio-Economic Development*,) examines how geography has strong and pervasive effects on economic and social development. He focuses his study on the Andean countries, spanning the equator in the tropics that have an exceptional geographical diversity within each country that have strongly marked their development. Geography plays an important role in these countries economic prospects, national integration, health conditions and agricultural prospects. In his book (*Human excellence in Organizations*, by **Sinha, A.K.P** 2003) deals about the development of excellence in the crucial human resource factors in all its aspects-be it career guidance, personal management, planning for competitive advantage or development of leadership in a team-based work scenario. In

short, this book is about the activities involved in bringing about human excellence in organizations. (**Sharma, Mukul** book on *Improving People's Lives, 2003*) offers a rare critique of the Asian experience from the viewpoint of people's empowerment. This book provides many insights and lessons for NGOs, bureaucrats and administrators, dealing with social and rural developments. Those in multilateral and inter governmental organizational and funding agencies, and students of development and voluntary action.

'Ecotourism and livelihoods' by (**Bhattacharya,A.K 2005**), addresses the key issues concerning ecotourism management, with special focus on community participation. It deals with a range of topics including the basic concept, forms, potential assessment, planning and case studies of ecotourism. At the same time, it discusses the new concepts and techniques of ecotourism, viz carrying capacity, community participation and auditing.(**Bloom E. David and Canning David 1999**), *'Economic development and Demographic Transition: The Role of Cumulative Causality'*, deals about the links between demographic and economic growth that are viewed as an interacting system with feed back in both directions. This framework implies that even relatively small exogenous shocks can ultimately have a powerful effect on income if the endogenous linkages between population structure, capital accumulation and income are sufficiently strong.

Rising incomes can led to a reduction in fertility that may trigger a virtuous spiral of falling dependency ratios, greater investment in education

and further economic growth. This virtuous spiral, linking increasing life expectancy, rising incomes and falling fertility must eventually come to an end. But it can in the interim, account for long periods of sustained improvement in living standards in developing countries, especially in the presence of a policy environment that is favorable to enjoying a *demographic gift*.

The author (**Chacko, .Pariyaram** ,2005) brings together significant contributions by distinguished Indian and foreign scholars on the sociology of tribes, particularly on the social history of a cross-section of tribes in these three societies in his book '*Tribal Community and Social Change*' .Also (**Goswami, Atul** book '*Traditional Self-Governing institutions among the Hill Tribes of North East India*' 2001) contains eleven papers written by eminent social scientists on the traditional self-governing institutions among the hill tribes of North east India not only describes but also critically examine the relevance of these institutions to the needs of tribal society in transition.(**Robb, Peter** 2006), examines whether there were South Asian concepts of race or has often been argued in his book, '*The Concept of Race in South Asia*'. Race becomes an issue in the sub-continent only under western influence after the 18th Century. The issues studied include South Asian equivalent of the concept of race, the nature of western concepts as applied to India during colonial period, and the origin and types of more recent variants. (**Kwasnicki Witold** 2004) in his paper '*Waves of Socio-economic development-An Evolutionary Perspective*', aims to outline an

alternative view on a wavelike development of human systems. The hypothesis is based on evolutionary interpretation of human knowledge development. There are some evidences that individual knowledge of each human being consists of paragons (understood as an ideal pattern of human behavior)-pf perception, cognition, behavior, understanding, and so on. Paragons play a role analogous to genes in biology and determine, in some way, the behavior of an individual in well-defined life situations. On the basis of biological analogy a hierarchical structure of human knowledge (a so-called archetype) is partitioned into six levels namely:

Epigenetic Paragons, (2) the image of the world, (3) the image of the society, 4) the image of the economic system, (5) the epistechne, and (6) the paradigm.

(**Thakur, Devendra and Thakur, D.N** 1994), book on *‘Industrialization in Tribal Areas’* studies the facts and figures industrialization in the tribal belts. It starts with review of tribal economy in the context of industrialization. It further deals with large, small and cottage industries established in the backward regions of the tribal population. In addition to these, it presents the study of industrial complexes in the tribal belts. Industrial planning in the tribal areas has also been a significant part of this world. In his book, *‘Socio-Economic development Plan’*, (**Winfrith Dorset-2005-2006**), deals about the energy Act of 2004 where it requires the Nuclear Decommissioning Authority to ‘(gives) encouragement and other support to activities that benefits the social or economic life of communities

living near designated installations, designated site or designated facilities or that produce other environmental benefits for small communities'. This plan describes work already carried out by Winfrith Staff in support of socio-economic development. The purpose of socio-economic plan is to ensure that the site acts as a responsible neighbors, minimize the impact on the local economy. In '*Socio-economic data for Economic development An Assessment,*' (**Reamer Andrew, Cortright Joseph** 1999) study the effective economic development requires an understanding of the dynamics of the regional economy-its current and recent performances, the evolution of its industry structure, the underlying reasons for these trends, and the challenges ahead. A critical means to gain such understanding is access to current, accurate socioeconomic data.

The purpose of this effort is to understand data user demographics, their work with data, heir knowledge of data sources and uses, and their approach to learning about data; ascertain the extent to which data users' needs are being met by data providers, particularly federal statistical agencies; recommend ways in which user needs can be better met, specifically through actions by federal statistical agencies, economic development professional and trade associations and EDA; and provide useful information to economic development practitioners about data sources and uses. (**Blodgett, John** 2007), in his book '*Greenhouse Gas Drivers: Population, Economic development and Growth and Energy Use*' explain the context of climate change and possible responses to the risk associated with

it; he points out three variables that strongly influence the levels and growth of greenhouse gas emissions: population, income (measured as per capita gross domestic product (GDP), and intensity of emissions (measures as tons of greenhouse gas emissions as per million dollars of GDP)

This is the relationship for a given point in time; over time, any effort to change emissions alters the exponential rates of change of these variables. This means that the rates of change of the three left-hand variables, measured in percentage of annual change, sum to the rate of change of the right-hand variable, emissions. For most countries, and for the world as a whole, population and per capita GDP are rising faster than intensity is declining, so emissions are rising.

(**Pimentel David, et al, 1996**) in their paper *'Impact of Population Growth on Food Supplies and Environment'* introduces a special issue on 'labour migration and the family in Asia'. It provides a brief review of economic approaches to labour migration, including some studies that have recognized the importance of the family in migration decision-making. Most of the work continues to be based on a broad human capital framework and highlight some of the limitations of such a theoretical model, including their failure to deal adequately with gender roles or the deeper structures that influence migration, such as globalization, colonization and national and local government policies. **Land, People and Politics Contest over Tribal Land in Northeast India**, by **Walter Fernandes and Sanjay Barbora, 2008**, where the focus is on the tribal land of the northeast India and how it is violated by

the people. It studies the land use systems, how it affects the gender and class, as northeast is a male dominated society. The study, conducted by the resource persons, deals with the ethnography of the region and studies the complex nature of the livelihood of the people. The study conducted on the 'Ethnography of the Nagaland-Assam foothills in Northeast India; by Ms. Dolly Kikon pp. 58 -87, sheds light on the history, socio-economic, political and geographical aspects of the people of this region. 'The historical and social ties in these foothills can become a framework to resolve the dispute' holds true, as there are lots of political turmoil between the two states, but there is positive outcome due to works conducted by the various NGO's and the administrative from both the states. 'Local customs and traditions, kinship based social relations, traditional political authorities, and other ethnocentric parameters, all these are very much active in influencing the socio-economic base of the respective communities' (**Bimal** 1995).

Nagaland being a tribal state has seen lot of changes since the last few decades and Mokokchung too is going through the transition. The intermingling of tribals and non-tribals which was a taboo in the ancient times and the embracement of Christianity which was brought by the American Missionaries, the need for economic development and social awakening are some of the changes found in the district. 'the socio-cultural situations that existed at the time of the formation of tribal policy do not remain the same today', (**Mohanty**, 1999,) *Cultural Heritage of Indian Tribals*.

Chapter 2

Physical framework of Mokokchung District

2.1 Location and Administrative Division

Mokokchung is one of the eleven districts in Nagaland and it became a full-fledged district in 1957. It covers an area of 1615 Sq.kms and is situated in the North-western part of Nagaland state; the district lies between 93°20'E and 95°15' E and Latitude between 25°6' and 27°4' N.

It is bounded by Tuensang district on the east, North Sibsagar and Jorhat districts of Assam (Fig.2.1) on the west and Wokha and Zunheboto districts on the south.(Fig.2.2) The district is divided into six (6) Ranges, namely - Ongpangkong, Langpangkong, Asetkong, Changkikong, Japukong and Tsurangkong covering an area of 1615 sq.kms.

The entire state of Nagaland is covered by high rugged terrain; however, Mokokchung district is less elevated as compared to other districts. The elevation of the district varies between 800 to 2000 feet above sea level.

In this region, the primary process in valley formation is the vertical corrosion or down-cutting through soft and loose geological strata by heavy rainfall which have resulted in and numerous gorges and valleys.

Nagaland has major river systems which all drains into the two major rivers that are Brahmaputra Drainage system and the Chindwin drainage system (Fig2.3). Of this major rivers the district is blessed with important rivers and streams like Milak, Dikhu, Tsurang or Dessai, Tzumok and Menung (Fig.2.4) all of which flows down into Assam state. The river Melak drains northern part of the district and has a discharge water capacity of 56,000 gallon per

day. Most of the rivers are not perennial in nature, they are rain-fed and therefore the water level goes down drastically during the dry winter season.

The district consists of three parallel chains of hill ranges, consisting of different spurs, running in a south-west to the north-east directions (Fig.2.5).

The southern portion of the district is comparatively more rugged than the northern part. About 60% of the total area of the district has an elevation of 2000' to 4000' and only the flood plains of the different rivers below is 1000' above sea level.

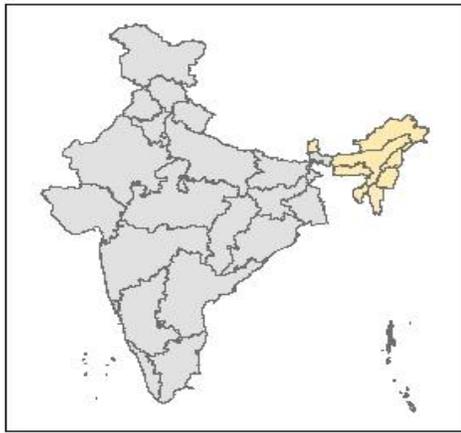


Figure 2 Map of India

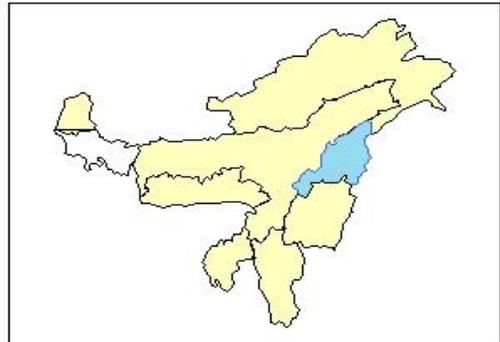


Figure 4 Map of North east India

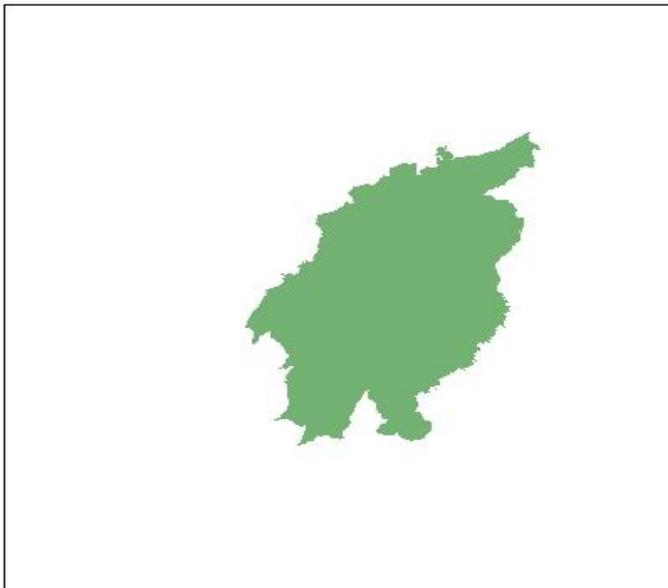


Figure 1 Map of Mokokchung

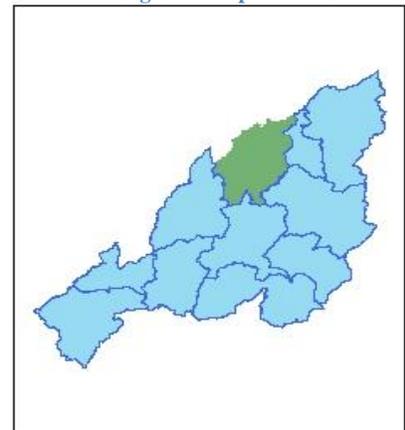


Figure 3 Map of Nagaland

Fig. 2.1: Location Map of Mokokchung District

The Study Based Area Map of Mokokchung District



Fig.2.2: Study Map of Mokokchung District

The rivers in Mokokchung district have not been exploited much for irrigation uses as the basins through which they flow are usually narrow and do not support stable or spacious cultivation. The total agricultural area under irrigation in the district was 7,250 ha in 1996-97, but it has reduced to 5601.69 ha in 2006-07, which shows that irrigation facility has not improved in the district. This reduction in the area under irrigation is attributed to the difficult terrain and also the popular practice of jhum cultivation in the hilly areas. However, of late, efforts are being made to utilize the fertile plots of land available in the valleys and near the river bends.

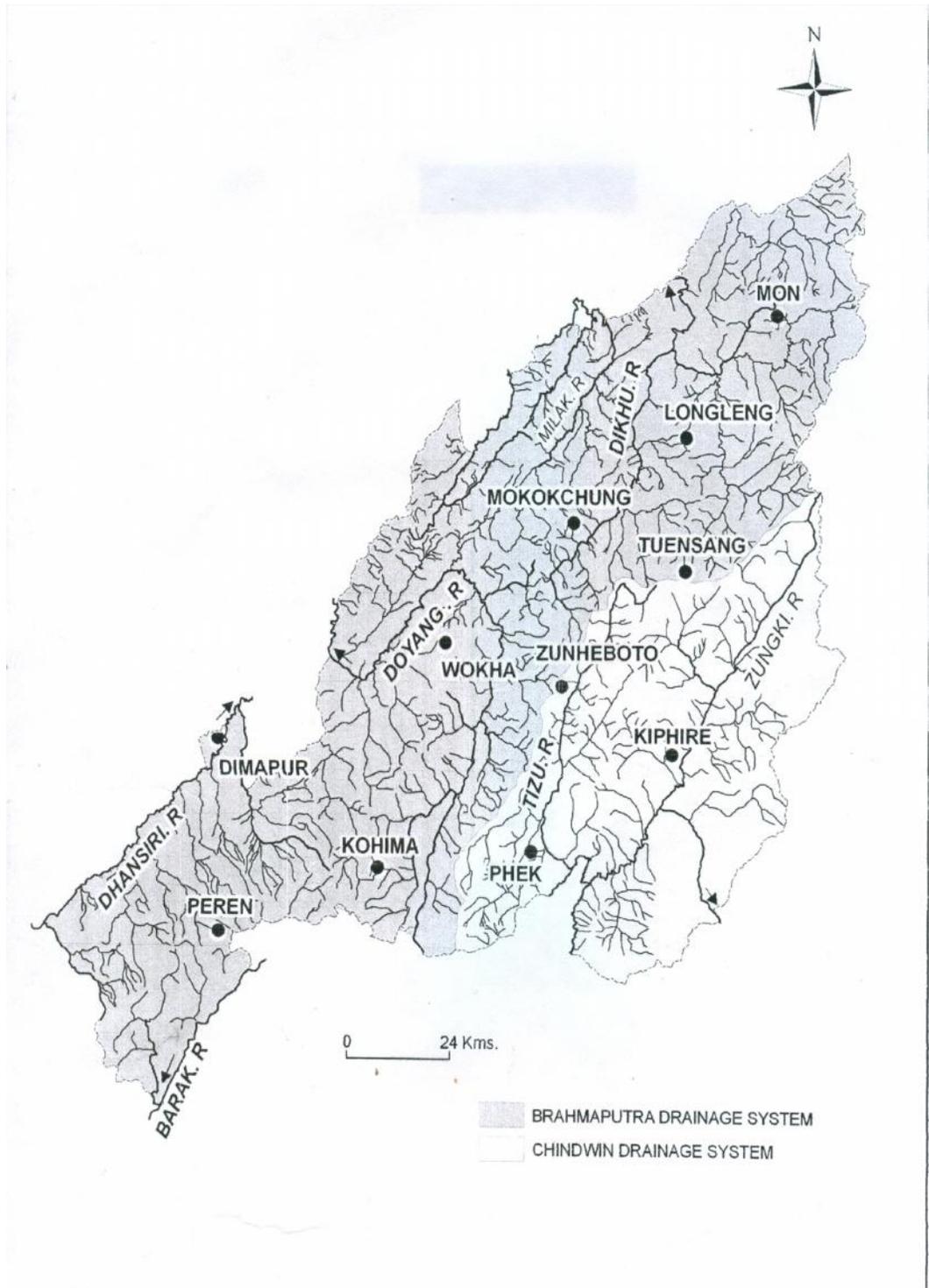


Fig.2.3: River system of Nagaland

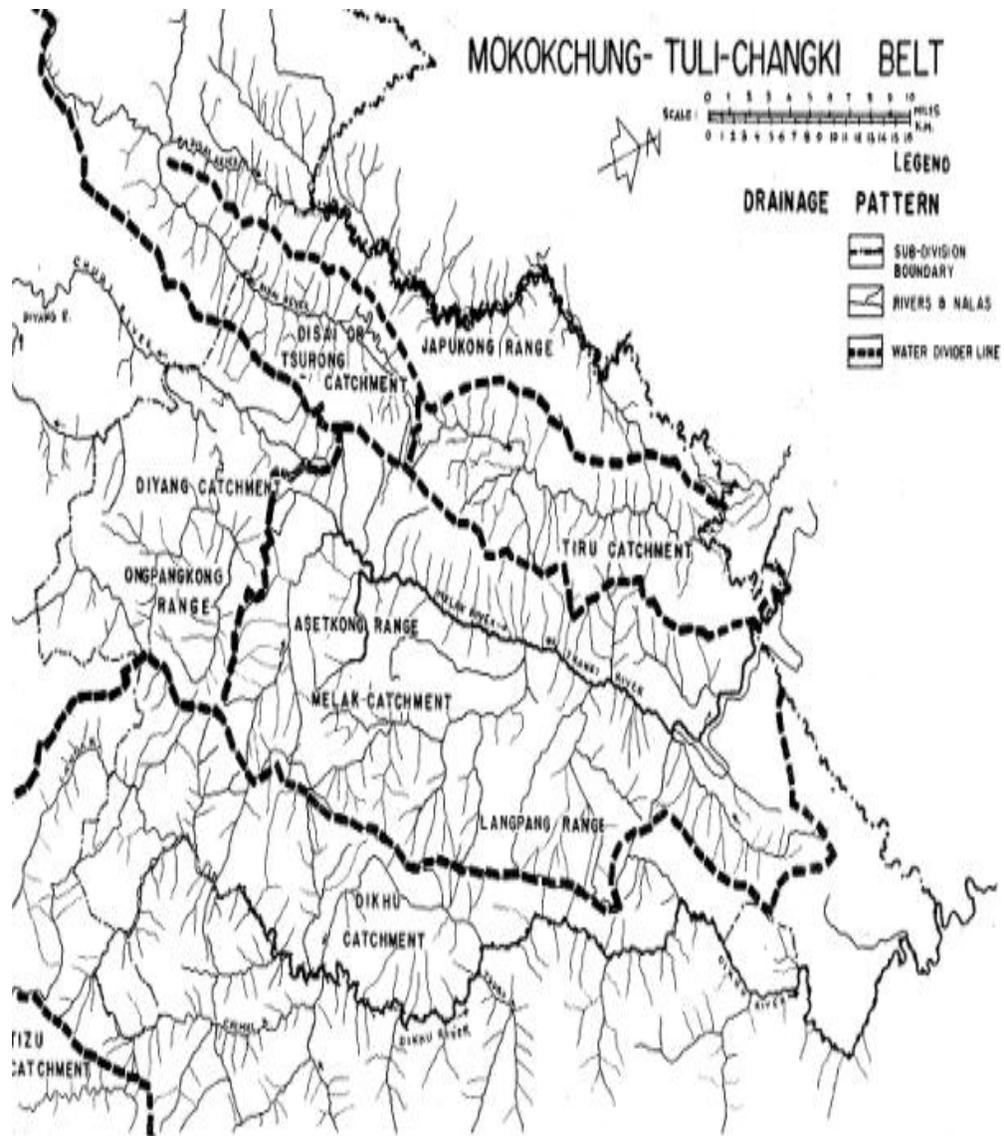


Fig.2.4: Drainage pattern of Mokokchung district

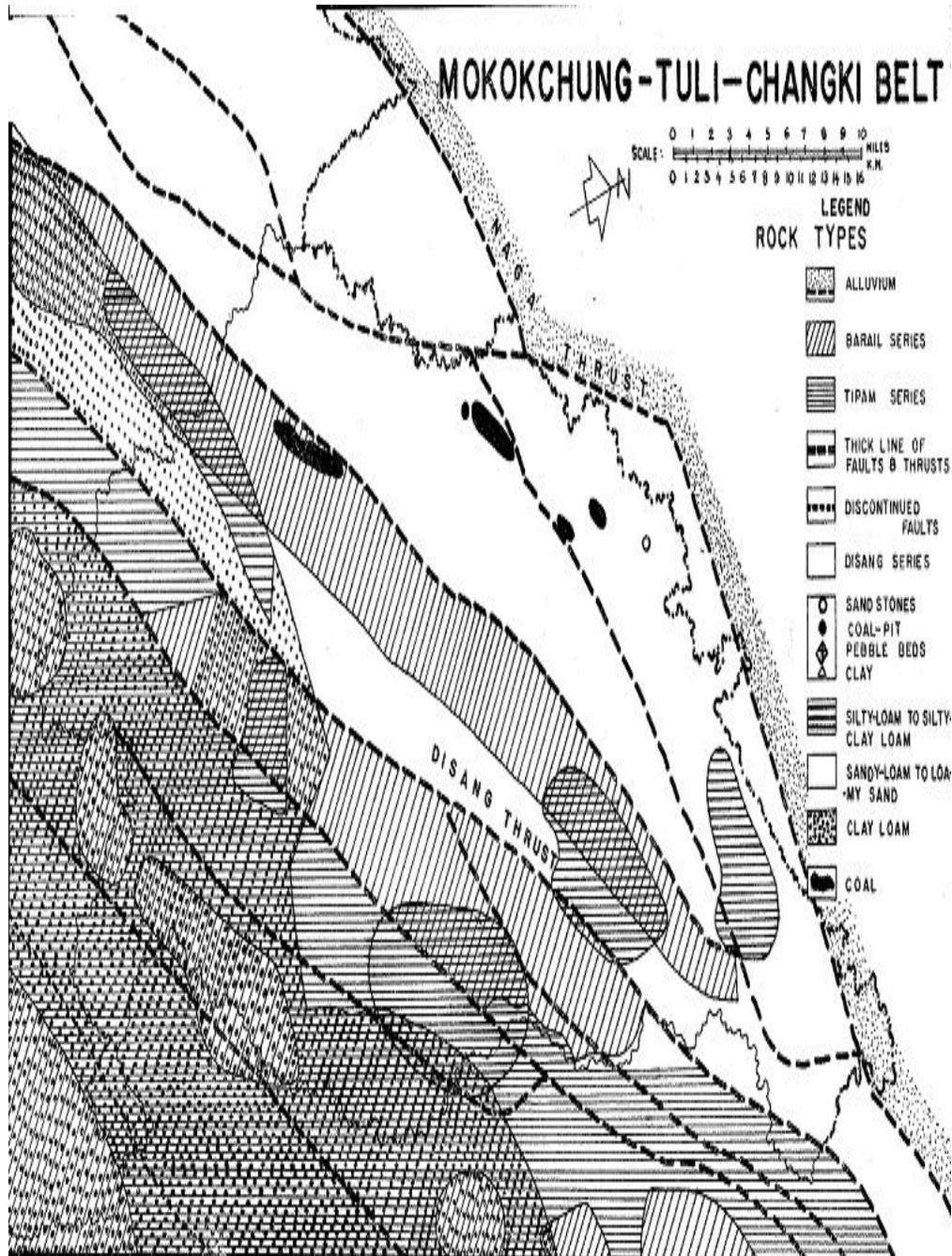


Fig.2.5: Rock types of Mokokchung district

Terrace cultivation and fruit plantations are being developed on the banks of the river Tzula and Tsurang valley. This valley area holds great potential for producing agricultural and horticultural crops and has great scope for permanent cultivation. Mokokchung district is generally a hilly region but there lies a substantial stretch of plain area between Changkikong and Japukong Ranges known as the Changki valley where permanent terrace cultivation has been carried out till today. Also, in the downstream inside the district, the Melak River and its tributaries have formed fertile flood plains, which are known as Changki and Tuli valley. The whole district is dotted with high hills and low laying valleys, with big rivers and thousands of streams and rivulets flowing down the hills, which makes it a unique place in the state.

2.2 Climate and Rainfall

The altitude of the district varies from 1000 and 2000 metres above sea level which depicts a hilly region. The lower ranges have sub-tropical climate whereas places at higher altitude have cool and temperate climate. The coldest month is December and January. In winter temperature comes down to below 10° Celsius. The temperature during summer is warm with average temperature of 27° Celsius but normally cool in the night time. There is no snowfall but frosting at higher altitude is common in winter. The average rainfall is 250 centimeters and the district normally enjoys heavy rainfall from May to October.

2.3 Soil

Like in other district of the state, the soil is acidic. There are three types of soil in the district, viz. red, latrite soil, brown earth and podzolic soil and addition to alluvium soil over the foothills and river valley.

The type of soil varies according to altitude. There is latrite type of soil in the foothill areas where the climate is hot and humid, whereas in the hilly areas where the climate is cool and temperate, brown earth and podzolic type of soils is found which is moderately fertile.

The soil found in the foothills is rich in deposits and is fertile and is good for cultivation. Organic carbon content is high in the higher altitudes, while the foothill areas, which are continuously cultivated lands, have low content of organic carbon. The soil is poor in phosphate (P_2O_5) excluding some patches adjoining Mokokchung town, Tuli-Merangkong and Waromung village areas.

The soil of Changki area is more acidic than other parts. This is believed to be due to the extensive coal mining in the area. The coal found in Nagaland is rich in sulphur content, and the coal mining releases sulphur in the environment which pollutes the water and land. In the northern and western parts and in the valleys, the soil is sandy loam. In the central portion around Mokokchung town, the soil on hill slopes is clayey loam, and in the valley it is silty loam and clayey loam. In the southern portion, the soil is clayey loam on the hill slopes and silty loam in the valleys. Due to prolonged erosion, the hardest strata are exposed and the occurrence of landslides is frequent, particularly on the roadsides connecting Mokokchung with Mariani. The

Amguri- Mokokchung road is less disturbed by landslides except beyond Tuli where the upper strata are composed of loose debris of conglomerates.

The physical constraints, the uneven climatic condition and the unfertile soil have put development into a standstill because of lack of investments and the apathy of the people and also a prolonged political conflict in the region. However, the importance of irrigation in agriculture has not been implemented mainly because of dependence on monsoon rain and due to the practice of jhum cultivation on the hill slopes. The lack of industries in the district is another major factor for the un-development of the region mainly because the rich resources are exploited without proper infrastructure which leads to not only environmental degradation but is also to economic losses. Besides, lack of proper road due to the difficult terrain pose much hardship to the people in the rural areas to move freely and quickly to sell their fresh crops in the market.

2.4 An Overview of the political setup of Mokokchung District

As per the 2011 Census, Nagaland has a total of 11 districts, namely, Kohima, Dimapur, Kiphre, Longleng, Mokokchung, Mon, Peren, Phek, Tuensang, Wokha and Zunheboto, 114 sub-districts, 26 towns (19 statutory and 7 census towns) and 1428 villages. Of this Mokokchung district has 5 towns namely, Mangkolemba, Tuli, Impur, Alichen and Changtongya which is the highest in the state as shown in table 2.1.

Table 2.1: List of 19 statutory and 7 Census towns of Nagaland

| | | |
|---------------------------|----------------------------|-------------------|
| Kohima | Dimapur | Mokokchung |
| Tuensang | Mon | Wokha |
| Zunheboto | Phek | Kiphire |
| Longleng | Peren | Jalukie: Peren |
| Nagimora: Mon | Poghoboto: Zunheboto | Tseminyu: Kohima |
| Medziphema: Dimapur | Mangkolemba: Mokokchung | Pfutsero: Phek |
| Chantongya: Mokokchung | Alichen: Mokokchung | Impur: Mokokchung |
| Aghunato: Zunheboto | Tizit: Mon | Bhandari: Wokha |
| Tuli: Mokokchung | Akuluto: Zunheboto | |

Source: Provisional census of India, 2011

Mokokchung district is mainly inhabited by Ao tribe though sizable population of Sema, Chang, Sangtam, indigenous Nepalese and other tribes and communities from various states of India co-exist. The district has 6 (six) ranges, namely, Ongpangkong, Langpangkong, Asetkong, Changkikong, Japukong and Tsurangkong and comprises of 81 villages (2001 Census).

Mokokchung district has a unique political importance in Nagaland. Apart from Mokokchung town constituency, parts of the town fall under three other state assembly constituencies namely, Aonglenden, Angetyongpang and Mongoya thus making the town the deciding factor in 4 of the 60 seats in the state legislative assembly. Leaders from the town played a major role in finalizing a deal with the Government of India at the height of the Indo-Naga conflict in the 1950s, resulting in the formation of Nagaland state as the 16th

state of India in 1963. Mokokchung has got ten (10) constituencies, (Fig.2.6)

they are:

1. 21 Tuli Assembly Constituency, (Fig.2.7)
2. 22 Arkakong Assembly Constituency, (Fig.2.8)
3. 23 Impur Assembly Constituency, (Fig.2.9)
4. 24 Angetyongpang Assembly Constituency, (Fig.2.10)
5. 25 Mongoya Assembly Constituency, (Fig.2.11)
6. 26 Aonglenden Assembly Constituency, (Fig.2.12)
7. 27 Mokokchung Town Assembly Constituency, (Fig.2.13)
8. 28 Koridang Assembly Constituency, (Fig.2.14)
9. 29 Jangpetkong Assembly Constituency, (Fig.2.15)
10. 30 Alongtaki Assembly Constituency. (Fig.2.16)



Fig.2.6: Constituencies Map of Mokokchung district

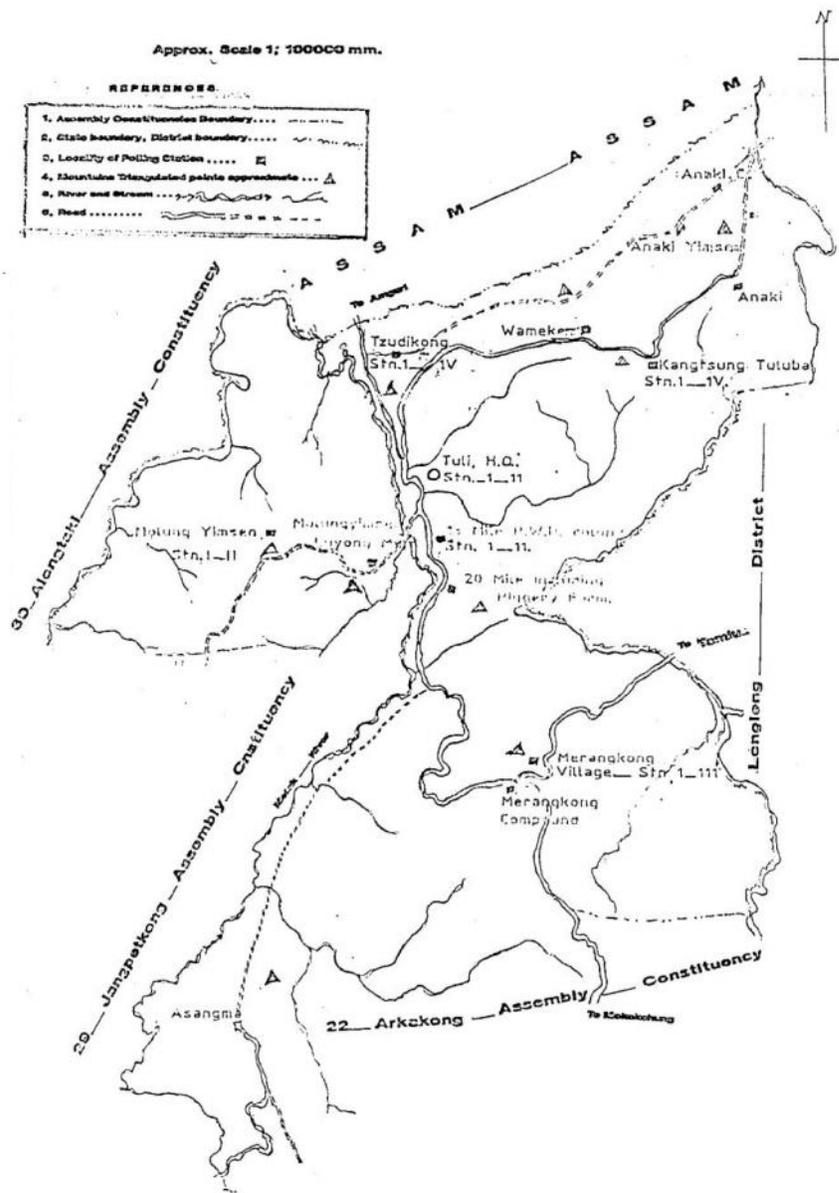
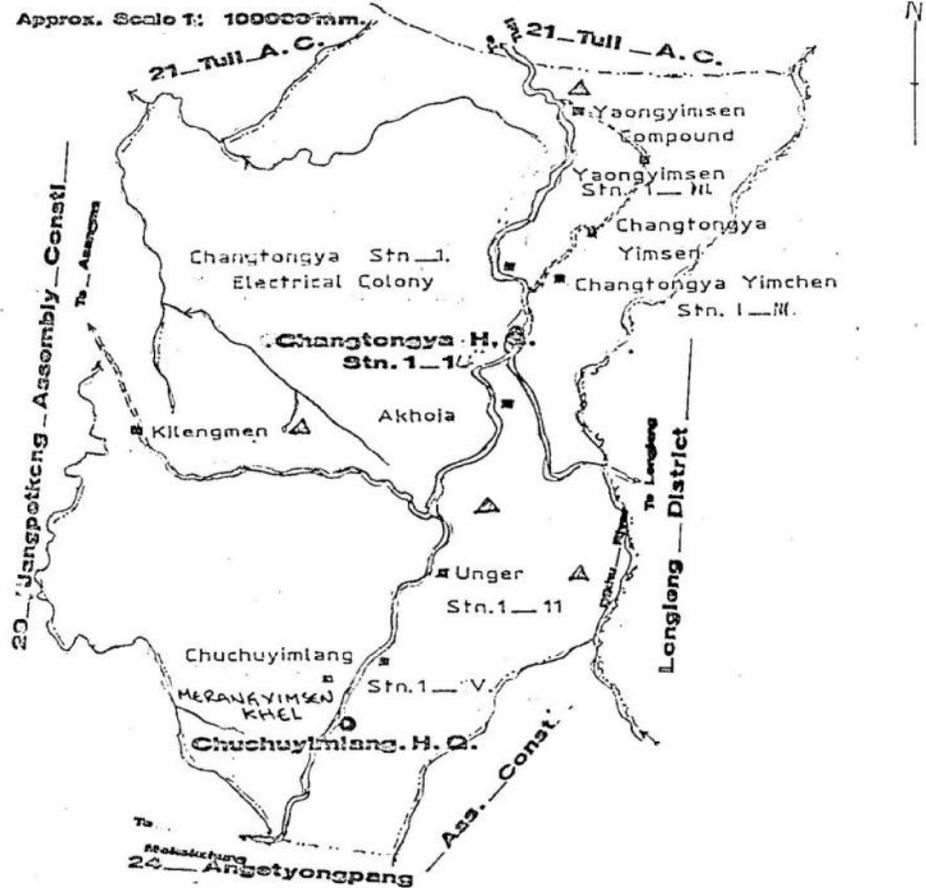


Fig.2.7: Map of 21 Tuli Assembly Constituency



REFERENCES

| | |
|---|-------|
| 1, Assembly Constituencies Boundary... | ----- |
| 2, District boundary..... | |
| 3, Locality of Polling stations..... | ■ |
| 4, River and Stream... | ~~~~~ |
| 5, Mountain Triangulated point approximate... | ▲ |
| 6, Road..... | ~~~~~ |

Fig.2.8: Map of 22 Arakong Assembly Constituency

Approx. Scale 1: 100000 mm.

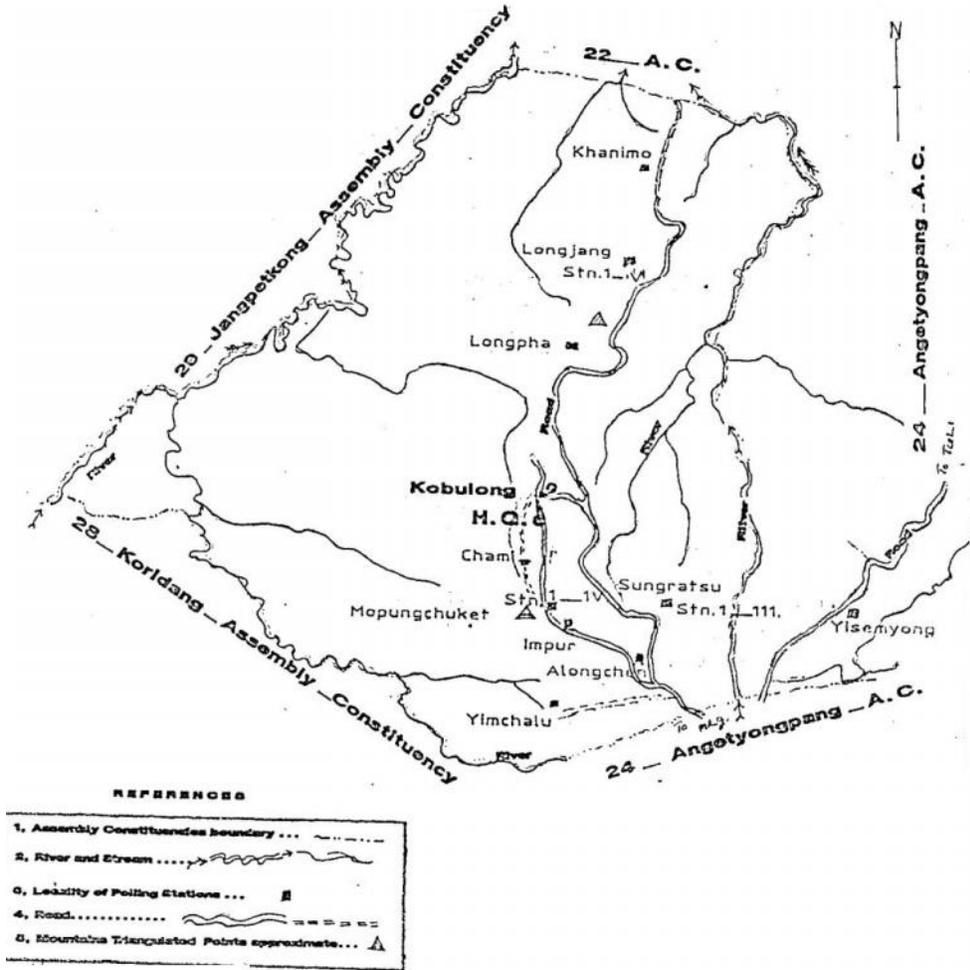
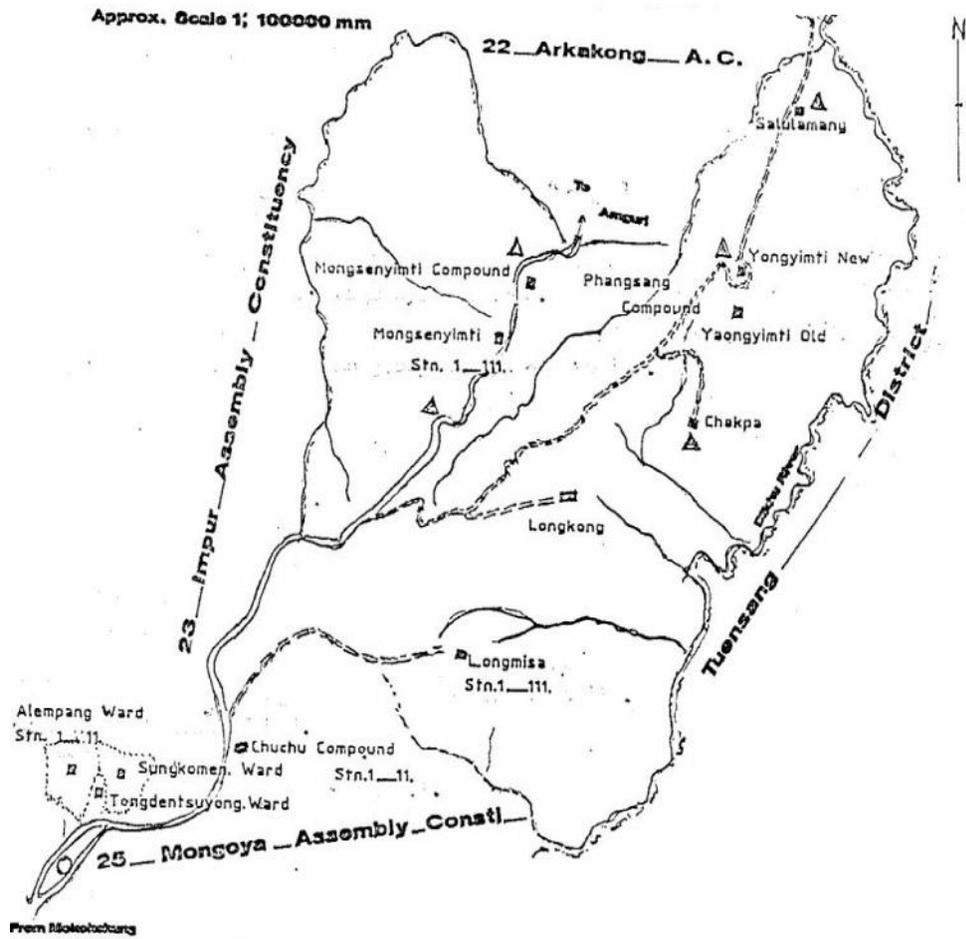


Fig.2.9: Map of 23 Impur Assembly Constituency

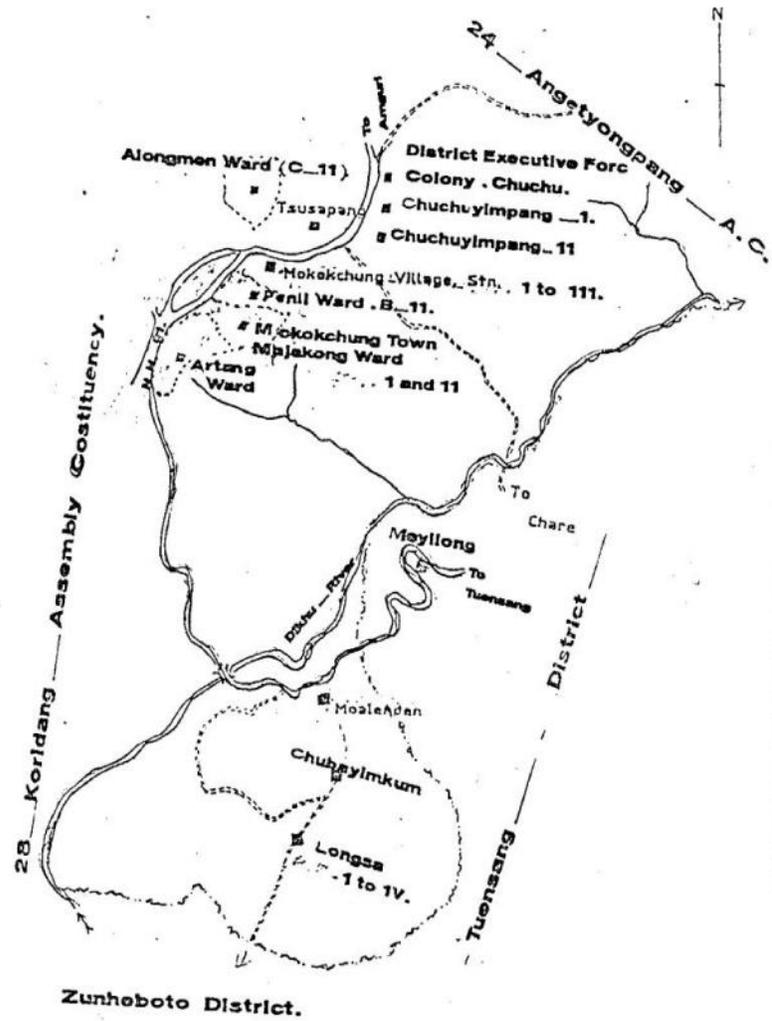


REFERENCES

| | |
|--|-----------|
| 1, Assembly Constituencies Boundary ... | |
| 2, District Boundary..... | |
| 3, Locality of polling Stations..... | ■ |
| 4, River and Stream | ~~~~~ |
| 5, Road..... | ==>==>==> |
| 6, Mountain Triangulated point approximate | ▲ |

Fig.2.10: Map of 24 Angetyongpang Assembly Constituency

Approx. Scale 1:100000 mm.



REFERENCES.

| | |
|---|--|
| 1, Assembly Constituencies / Ward Boundary..... | |
| 2, District Boundary | |
| 3, River and stream..... | |
| 4, LOCALITY OF POLLING STATIONS..... | |
| 5, Road | |

Fig.2.11: Map of 25 Mongyoya Assembly Constituency

Approx. Scale 1: 100000 mm.

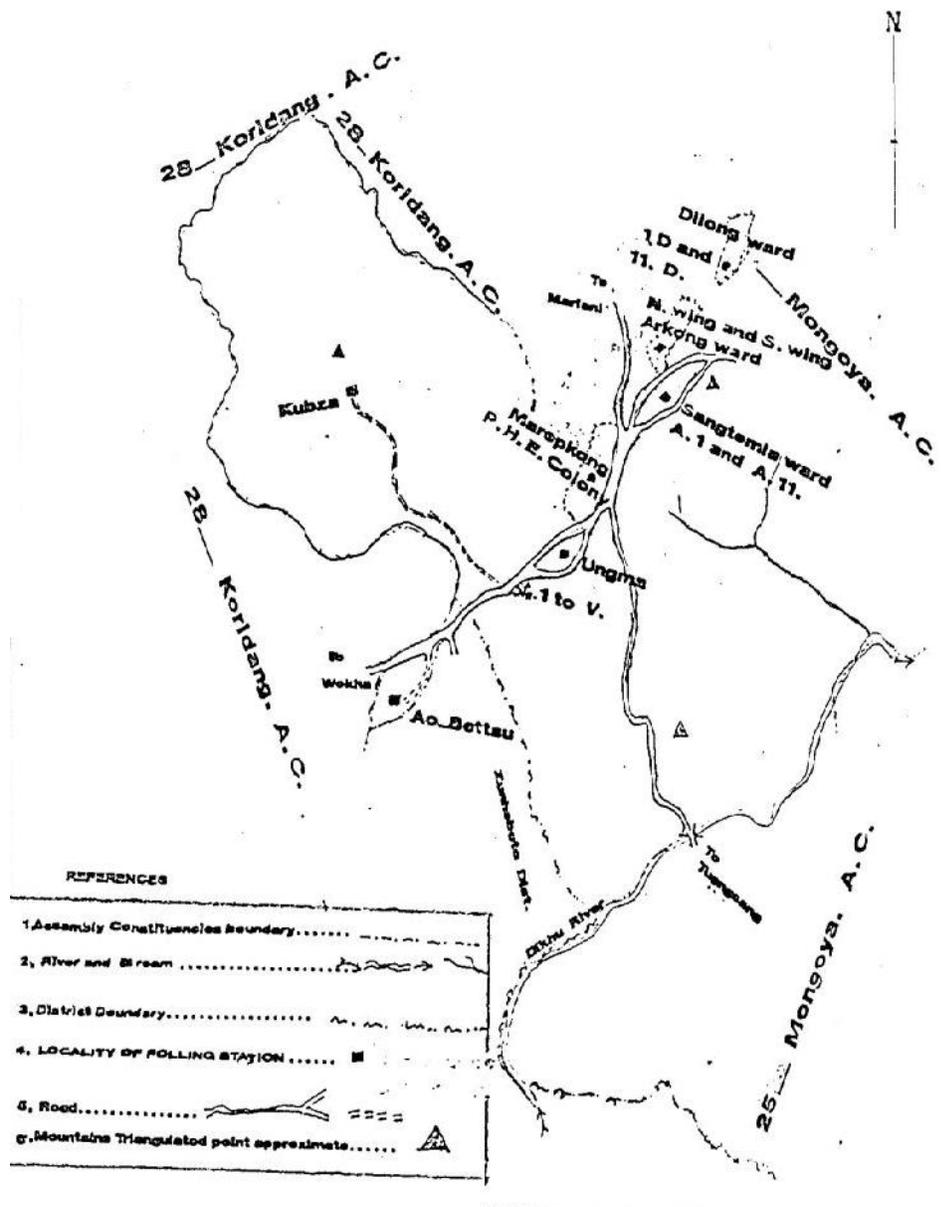
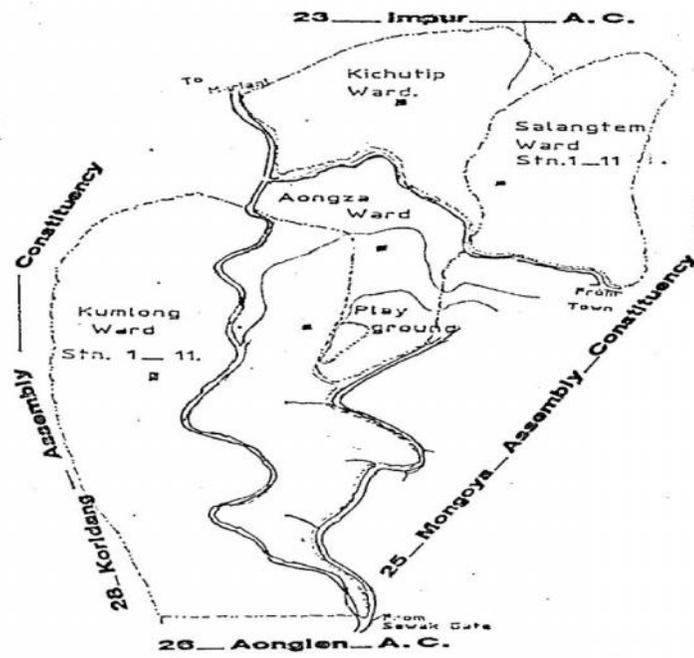


Fig.2.12: Map of 26 Aonglenden Assembly Constituency

Approx. Scale 1:20000 mm.



REFERENCES

- | | |
|---|-------|
| 1. ASSEMBLY constituencies/Ward boundary..... | ----- |
| 2. Road | ----- |
| 3. Locality of Polling Station..... | ■ |

Fig.2.13: Map of 27 Mokokchung Town Assembly Constituency

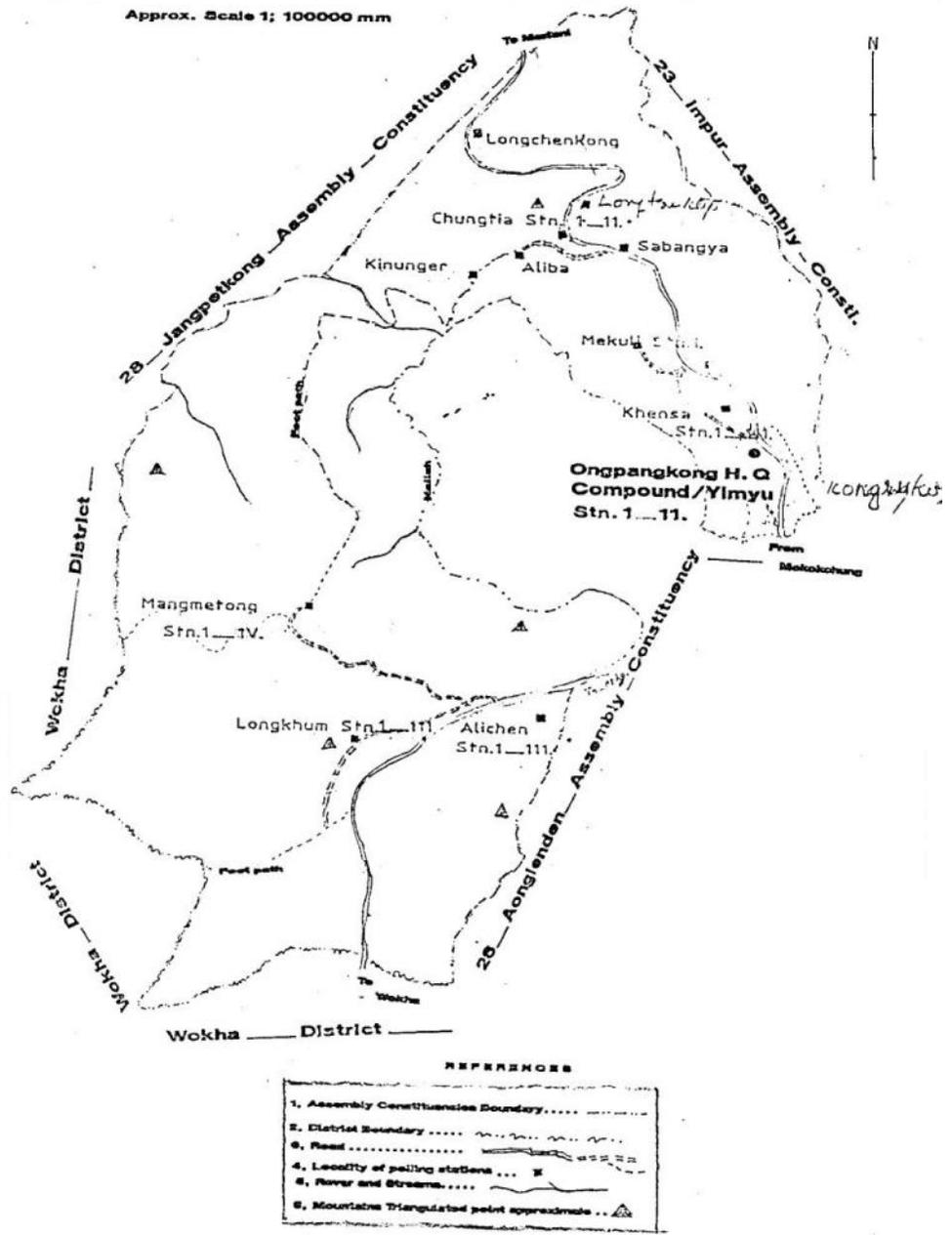


Fig.2.14: Map of 28 Koridang Assembly Constituency

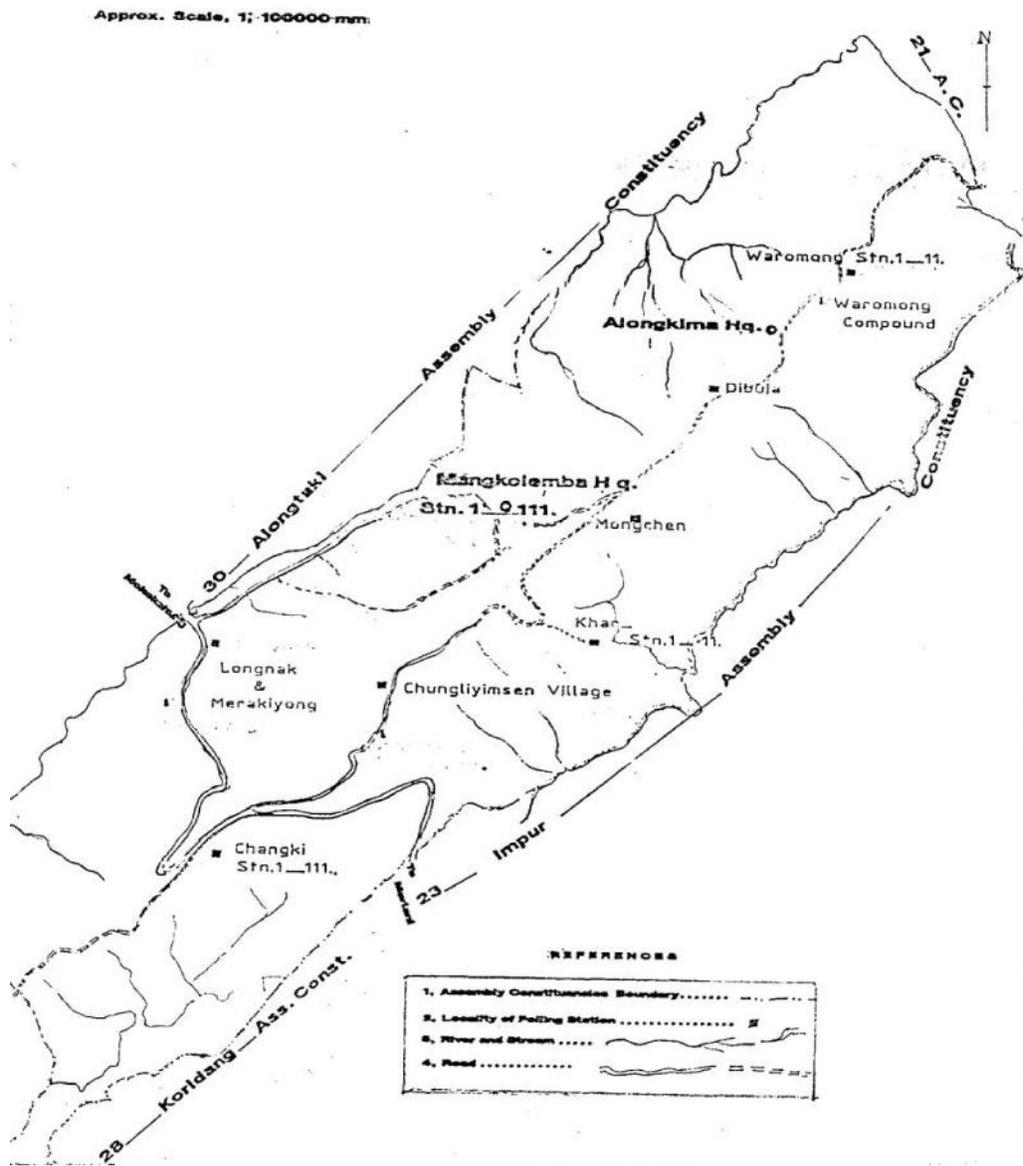


Fig.2.15: Map of 29 Jangpetkong Assembly Constituency

Approx. Scale 1: 200000 mm.

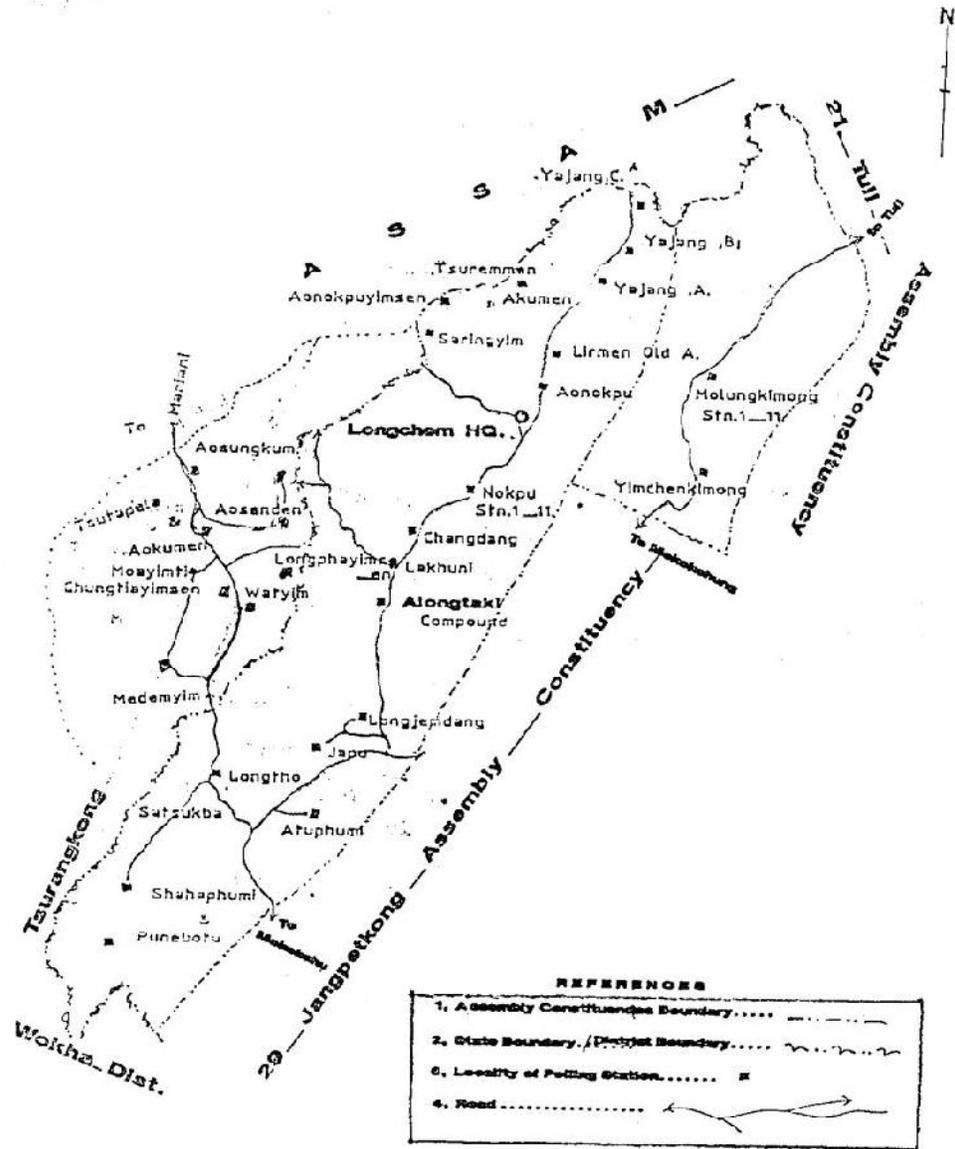


Fig.2.16: Map of 30 Alongtaki Assembly Constituency

2.5 Administrative history of the Mokokchung District

Mokokchung district came into being on 1st December, 1957. The Naga Hills district was formed in the year 1866 with an administrative headquarter at Samaguting (Chumukedima). In 1876 the headquarters of Naga Hills District were set up in Kohima and that is the time when Mokokchung area also came under the British administration (Map 2.17).

In 1889, the government opened an administrative centre (Sub-Division) in Mokokchung. For administrative convenience Tuensang division of the then North East Frontier Agency (NEFA) was added with the then Naga Hills and it was renamed as Naga Hills Tuensang Area (NHTA) and the Mokokchung Sub-Division became one of the districts of NHTA. The advent of Christianity into the district in 1872 helped in speeding the process of development as the Christian missionary brought education to the people who helped them to accept new ideas and challenges.

After Nagaland attained its statehood in the year 1963, the state as well as Mokokchung district has witnessed drastic changes in every sphere of life. The spread of Christianity and education, the development of road and transport communication has all contributed to the changes in the society.

2.6 Developmental planning of Mokokchung District

In the past few decades Mokokchung district was socio-economically undeveloped and the concentration of the people was more in the rural areas even though there was a town in the main district headquarters.

The rugged terrains of the district have hampered the growth of development which limits the availability of land for industrial development. The peculiar geological formation and the thrust folds of the bed-rock leading to inclines of the geological strata and frequent tremors, and the torrential rains leaching out that exposed uplands causes frequent landslides, which further limits the development prospects. The ranges of hills abutting the Changki valley is rich

in coal and sandstone but these hills break into wild chaos of spurs and ridges, deep gorges and steep terrains. Mining activity is being carried out in these hilly areas, however the prospects of settlement is difficult due to the rough terrain. No wonder, the heavy industry Tuli Pulp and Paper Mill is located in the plain area of Tuli town while the Nagaland Fruit Processing Unit is located in the Longnak valley.

However, the flatland located in Changki valley is used extensively for the cultivation of rice paddies; around 12 square kilometer of the total flatland is under irrigation which has helped in producing huge quantity of paddy every year. The region is also well suited with rail and air ways connections because of its close proximity with Assam. However, the prospects of turning the Changki valley or the Longtho valley area near Assam seems like a distant dream simply because it would need a strong political will and huge investments to develop the area into a modern area.

Nonetheless, the valley areas around Tuli which is noted for the paper and pulp industry is a well developed urban town in the northern part of the district. The land around this region is found desirable for the production of the bamboos and reeds but unlike Changki valley which is exploited more for rice cultivation than for settlement, the Tuli area has witnessed the growing expansion of the urban town because of the job opportunities that were created after the paper mill was established. Unfortunately, this sudden boom in the population in and around the paper mill area has put a huge constraint on the availability of land in the area.

The development of land in other parts of the district is negligible except near Mokokchung, Changtongya, Merangkong and Lirmen villages. Areas around Lirmen village west of the Tiru River are particularly good for forest development for the plywood species.

2.6.1 Road Connectivity

One of the major problems faced by the district is the lack of adequate road network particularly around Melak and Desai rivers which leaves out a large part of the district from urban and industrial developments. Road connectivity plays an important role in the development of any region and Mokokchung district even though it is connected by two major National Highways; still most of the interior areas remain remote and unconnected by good roads due to many reasons.

The Border Roads Organisation and the Roads & Bridges Division of the Nagaland Public Works Department (NPWD) are the two agencies that look after the different roads in the district. However, due to the rough terrain and the loose soil formation of the district, construction of an all-weather road in the district remains a huge problem. Though the roads are repaired quite frequently, the monsoon season bring frequent landslides and also the loose soil area sinks, thereby damaging the road. Road transportation remains a big problem in the district which is directly or indirectly hampering the development of the district because the absence of good roads has led to the absence of good markets and transportation facilities.

2.6.2 Water supply

Mokokchung district depends on the monsoon rain for their water supply. The rivers flowing through the district are mostly rain-fed and therefore they usually dry up during the dry winter season. The citizens of Mokokchung town drain the water for drinking purposes from the many fissures in the hills through which filtered water trickles, and rarely from the streams and rivulets at the foothills. But since the town has grown ten times its size in the last few decades there are mounting pressures and the demand for water has increased. The dependence on rainfall is not enough to meet the demand of water as during the winter season there is a long spell of dry period. Therefore, the citizens of the town have to search for other means of water supply for the town and had to tap water from rivers and streams located in other districts.

In the villages, there are abundant water sources in the form of big rivers and natural springs. However most of the villages are located in the hills, where the natural springs through the fissure in the earth are scarce. The villagers collect water for drinking and other uses from these natural springs; however the springs usually dry up during the winter season and during the months of December till March/ April, the people face a lot of hardship due to water scarcity in the hill area. However, of late the Government has initiated water supply through pipes to many villages in the district and the condition of villagers has ameliorated to some extent.

2.6.3 Power supply

The main source of power supply to the region is from Assam and the cost of energy purchase is higher than other source of generation of power. The consumption of power has greatly increased in the district and this has brought lots of load shedding hours. The consumption of power has increased in the town mainly because almost all the works are done by electricity. The consumption of power in the district is 28.77 MKHW in 2008-09 which is only 5.70% of the total state consumption of energy.

2.6.4 Socio-economic set up of the district

The main occupation of the people is agriculture and jhum cultivation is predominantly practiced by the people. This type of agriculture does not depend on irrigation as monsoon rain provides the water for the seasonal crops. But, gradually the small district headquarters located in the Ongpangkong Range expanded because the rural people began to understand the need for better livelihood and started migrating to the town for education, employment and business entrepreneurship. The mobility of people from the rural and urban sector has brought huge socio-economic changes in the district. The town has become one of the important trading places for the people of the district as well as for the other districts because the main state highways passes through the town connecting it with other districts like Tuensang, Zunheboto, Wokha and Longleng. In order to understand the developmental planning of the district, it is important to study the different

socio-economic planning such as, economic base, agriculture, movement of people, education, social infrastructure and traffic and transport.

2.6.5 Economy

The main economy of the district is based on agriculture and about 80% of the population is engaged in agricultural activities. Cottage industries have also been given importance by the people but the market value is low as exporting of the manufactured goods is minimal due to poor transportation facilities. The composition of the secondary sector employment appears much unbalanced. Manufacturing and processing activities are springing up only of late and is yet to gather momentum of growth, or to be more precised, they are to get fully organized, due to lack of knowledge and expertise. This imbalance in the occupational pattern is clearly indicated in the distribution of employment in the tertiary sector.

The people of Mokokchung district had little knowledge about trade and commerce. It is only recently that some enterprising youths are taking to trade and commerce as a profession in the society. The product of traditional activities in the past has hampered the economy of the people greatly because the surplus products of the villagers could not be marketed outside and were simply left to waste away.

However, in the process of modernization, the occupational structure is fast changing particularly in the non-agricultural sectors. The government employs, a very large number of the working force amounting 26.35% of the

district employed is predominantly in security and other government departments.

The coal mining activity is also a lucrative business in the district. Though the government does not undertake any mining activity in the district, the villagers themselves explore coal in their village land and exported to the other parts of the country. The coal mining activity is quite disorganized and the villagers sell and send the coal to other districts at their own prices which usually implies that the villagers are selling at a loss. Coal mining is carried out in areas belonging to the villagers of Anaki, Changki, Mongchen, Lakhuni, Molungkimong, Merangkong etc. However, the coal mining is unplanned and most of the villagers resort to 'rat-hole' method of coal mining which is not only uneconomical and unscientific but also harmful to the environment. Besides, there are many entrepreneurs who have opened up small business enterprises and run their families by running their businesses.

2.6.6 Agriculture

In Mokokchung district the main problem in the agriculture sector is principally one of increasing the productivity per unit land, the productivity per worker and increasing the land under perpetual cultivation. Shifting cultivation has been widely practiced in the hilly area which has lead to loss of soil due to severe erosion. The people still employ tradition techniques of farming and use of machineries and chemicals in the fields is quite lacking. The major crops grown are paddy, maize, tapioca, soyabean, mustard, peas,

etc. The commercially cultivated crops include passion fruit, oranges, cucumbers, bananas, tea, mustard, tapioca, betel vine, betel leaves, rubber etc. Lately Mokokchung has made a remarkable achievement in the field of horticulture crops production and also floriculture-roses, carnations, liliams and orchids mostly being grown in Yisemyong. However, the demand of land for agricultural and horticultural farm lands has led to rampant destruction of natural forest land.

2.6.7 Social infrastructure

Mokokchung district faces lots of hardship due to lack of development in terms of water supply, power, housing and other amenities. However, the urban areas have seen some improvements in development of utilities and services as compared with the non-urban areas. The main problems of the region is the lack of infrastructure and deficiency in their provision which constraints the growth of the region. Mokokchung Town and Tuli Industrial area shows slight improvement as compared with the other rural areas and the presence of non-Nagas are seen in these urban areas. However, the sanitary condition of the town and the personal hygiene of the people need to be improved greatly. Mokokchung town is regarded to be the cleanest town in the entire Nagaland state, however the sight of clogged drains, pile up of garbage in the dumps etc., indicate that a lot needs to be done. In the rural areas, thankfully the villagers have stopped rearing of pigs in the open and have also stopped open defecation, which shows a mark improvement in

personal hygiene. However, cleanliness remains a issue and the overall cleanliness of a town or village cannot be termed as above average, except for some villages.

2.6.8 Education

Mokokchung district has the highest literacy rate in the state. Ever since Nagaland attained statehood, the state government has always given top priority to education, and the people have also taken the education of their children with great seriousness. The educational institutions in the district impart quality education to the students and the district had been producing good academic results in the Board Exams. However, there is a lack of technical institutions in the district, and in this 21st Century, lack of technical education puts a big question mark on the employability of scholars in any organization. Most of the educated youths are those having a Bachelors or Master Degree in science, arts or commerce streams. There are very less qualified technicians and specialists on many fronts in the society, which is hampering the overall development of institutions in the district.

2.6.9 Health

The state government aided by the central government has opened up Primary Health Centers in almost all the villages and Community Health Centres in the sub-division, which looks after the sick and ailing people in the area. There is a district hospital in the main district headquarters, which is the first

referral point for many patients not only in Mokokchung but also for the patients of other districts like Tuensang, Zunheboto, Longleng etc. There are also some private nursing homes with more medical facilities and scientific equipments. However there is a dire need for a properly maintained and well equipped hospital in the district which can look after the patients suffering from diverse ailments. Nevertheless, the health sector is doing a fine job in looking after the health of the people and the increase in population is attributed to the improved health infrastructure in the district. The overall sex-ratio for the district in 1971 was 835 females for every 1000 males. This is significantly lower than the state figures of 872 females per 1000 males. In the urban area, the ratio is 417 and in the rural areas it is 961. The sex-ratio tends to vary inversely with the rate of growth of population, i.e. the greater the growth rate, the greater the mobility of people; and the greater the mobility, the lower the ratio.

2.6.10 Religion

Religion wise, Christianity is the highest with more than 95% of the population being Baptist. The Aos are the pioneering among the Nagas to embrace Christianity in the 19th century, and the area is the hub of India's Baptist belt. The revivalist movement that swept the entire state of Nagaland in the mid 1970s has originated in Mokokchung District and Mokokchung was a major centre. Impur, 15 kilometres away, is the centre of the Baptist Arogo Mungdang (Ao Baptist Churches Convention). The main town Baptist

church, located at the heart of the town, is one of the largest churches in Asia. However, in the towns there are many migrant businessmen who have settled down for a long period of time. These migrants are mostly Marwaris, Beharis, Assamese and Bengalis; they follow their own religion and live in harmony with the Ao community without any problems.

2.6.11 Movement of People

From time immemorial the people of the district have maintained their cultural integrity by having socio-economic barriers with the people from the plains or vice versa. However, with the advent of modernity through education and Christianity, the once closed Naga village society has now being opened up to the outside world. Likewise, the Ao society has also taken a cosmopolitan nature, where people from different villages and communities freely and openly interact and share ideas and live in harmony. Migration to towns from the villages and also the migration of other communities from other Indian states have greatly affected the socio-economic life of the people in the towns and settlement. The migration of people and its influences on the socio-economic cultural development is studied in detailed in Chapter 4.

2.6.12 Transportation and communication

As of now the principal means of transportation anywhere in Nagaland is by road. This met the requirements of the days when the roads were first cleared some five to six decades ago. Subsequently, new roads and its connectivity

were constructed. This region is devoid of any railway linkages due to its difficult geographic terrain, though there is a railway line connected upto Tuli paper mill has been neglected for quite some time. The only railway line and air port facilities of Nagaland are found in Dimapur, which is outside the district. Railway connections are available to the Mokokchung district mostly from the junction at Amguri, Mariani and Furkating which are all located in the State of Assam. The Jorhat urban area also provides an air service and as such it acts the most important trading link between the region and the rest of India through Assam.

Construction of roads in the district faces lot of problems due to difficult terrain and inhospitable environment. As such most of the local and village roads and district roads are directly connected with the state highways and there are a fairly large number of accesses to state highways. Lack of adequate maintenance of the road is one of the problems faced by the people of the district. There are lots of junctions where the villagers can access the road, but it is the constraints due to topographical reasons and also some other developmental issues, that large section of the roads are still unsurfaced. Most of the roads of the district are typically of narrow width, bad surface and poor nala conditions or lack of surfacing, which results in frequent erosion due to heavy rainfall. Higher gradient make a very large share of the roads in the region unusable for many vehicle to ply regularly. Due to the incessant rainfall during monsoon season the surfaced roads are washed away

like, for instance, the Changkikong range from Changki to Yimjenkimong which stretches to about 40 kms is in a very pathetic condition.

The state highways between Tuensang and Mariani via Mokokchung and the State Highways from Zunheboto and Amguri via Mokokchung cater not only to intra-regional movement of people but also acts as the most important transit corridors for inter-regional passenger movement. The total transit movement of goods through Mokokchung town comprises more than 39% of the entire inter-regional goods movement of Nagaland.

The Amguri-Mokokchung road today is by far the most important highway within the district and it connects on its way, important settlements like Tuli, Changtongya, Chuchuyimlangand Merangkong towns. Over 35% of the traffic between Tuensang district and Kohima district is also diverted through the district along the Mokokchung-Mariani Road.

Table 2.2 and table 2.3 shows the length of road under P.W.D construction, out of which the surfaced district highway has increased from 14 (1999-2000) to 232.20 (2008-09) and the unsurfaced district highway has reduced from 126 (1999-2001) to 38.50(2008-09) under Mokokchung district.

Table 2.2: Length of Roads under P.W.D (Km), 1999-2000

| Areas | State Highway | | District Highway | | Village Road | |
|------------|---------------|----------------|------------------|--------------|--------------|--------------|
| | Surface d | Unsurf aced | Surfaced | Unsurf ed | Surface d | Unsurf ed |
| Nagaland | 277 | ----- | 66 | 789 | 2129 | 3021 |
| Mokokchung | ----- | ----- | 14 | 126 | 383 | 440 |

Source: Directorate of Economics & Statistics, 2001

This shows that road construction is carried out at all level though at a slow pace. Whereas the state district highway under surfaced road was 66 and unsurfaced was 789 (1999-2000) and it has increased to 1674.30 of surfaced road and the unsurfaced road to 559.60 (2008-09) indicating that road maintenance has improved at the state level. But the most important road for the district is the village road as most of the population is settled in the villages and the condition of these village roads has degraded due to poor maintenance and management.

Table 2.3: Length of Roads under P.W.D (Km), 2008-09

| Areas | State Highway | | District Highway | | Village Road | |
|------------|---------------|----------------|------------------|----------------|--------------|--------------|
| | Surface d | Unsurfa ced | Surfaced | Unsurf aced | Surface d | Unsurf ed |
| Nagaland | 468.68 | 6.00 | 1674.30 | 559.60 | 1706.85 | 3419.92 |
| Mokokchung | 18.00 | ----- | 232.20 | 38.50 | 353.00 | 520.00 |

Source: Directorate of Economics & Statistics, 2001

The data shows that the surfaced road categorized under the village road was 383 in 1999-2000 and the unsurfaced was 440 which have decreased to 353 under surfaced roads and 520 under unsurfaced roads in 2008-09. It shows that most of the village roads are under the unsurfaced road which creates lots of difficulties for the villagers in particular and the people of the district in general. Poor road condition is one of the main reasons for the underdevelopment of the villages as well as the district.

Chapter 3

Population characteristics of Mokokchung District

3.1 Introductory Statement

The development of any region depends on the population and the accumulation of a productive stock of human capital is thus one of the fundamental keys to the development process (Cypher & Dietz, 2005). The growth of population whether from rural to urban sector and migrations from other areas helps in determining how developed the society is, whether the people are literate having educated labour force or not is determinant to the development of any region. The issues of illegal immigrants and their impact on the society as social enmity and to the downgrading of economy by the high growth of population with lack of skilled labour are some of the problems which affect the region.

Mokokchung district of Nagaland is considered to be one of the most developed districts and is one of the major metropolitan towns of the state. The district has recorded the highest literacy rate in the state and also the highest growing population in the state. In order to examine the population characteristic of the district it is importance to assess the growth of population, quantum of migration and status of economic development.

3.2 Trends of population growth over the past decades

Nagaland state though small in area has 11 districts with diverse population patterns according to the size and location of the district. The district wise population of Nagaland as per the provisional census of 2011 is found in table 3.1 and the charts shows the percentage of the population and urban

population of the districts. Nagaland has seen not only a growth in the number of urban centres but also a growth of urban population in the last decade. From a total of 11 towns as per the 2001 census, the state now has 19 statutory towns and 6 census towns. Further, there has also been a change in the grade of towns, with towns being upgraded from Grade V to Grade IV and from III to II and even from II to I. One of the reasons for the increase in urban population could be climate related stress and migration from rural centres to urban centres (Urban Development Planning Nagaland, 2011). The following gives a broad overview of the demographic profile and growth of urban centres in Nagaland.

Table 3.1: District Wise Population as per 2011 Provisional Census

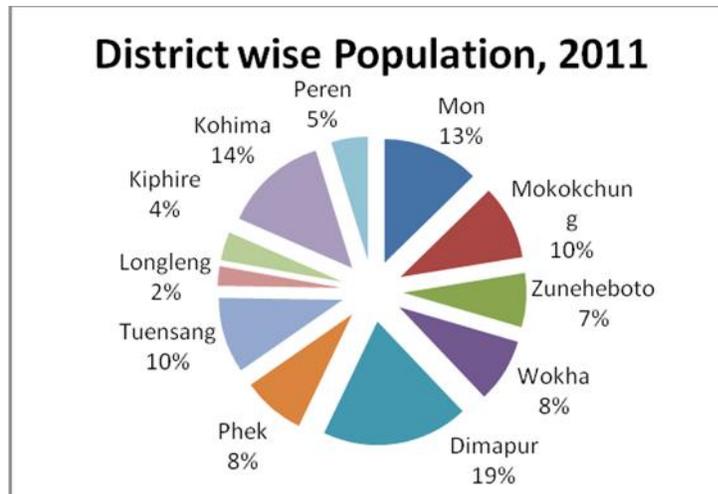
| Sl No. | District | Total Population | Rural Population | Urban Population |
|--------|--------------|------------------|------------------|------------------|
| 1 | Mon | 250671 | 215954 | 34717 |
| 2 | Mokokchung | 193171 | 137519 | 55652 |
| 3 | Zunheboto | 141014 | 113404 | 27610 |
| 4 | Wokha | 166239 | 131245 | 34994 |
| 5 | Dimapur | 379769 | 182479 | 197290 |
| 6 | Phek | 163294 | 138686 | 24608 |
| 7 | Tuensang | 196801 | 159960 | 36841 |
| 8 | Longleng | 50593 | 42984 | 7609 |
| 9 | Kiphire | 74033 | 57538 | 16495 |
| 10 | Kohima | 270063 | 146914 | 123149 |
| 11 | Peren | 94954 | 80150 | 14804 |
| | Total | 1980602 | 1406833 | 573769 |

Source: Provisional Census 2011

As per the provisional population, the total population of the state stood at 19,80,602 (Table 3.1). Of this the rural population stands at 14,06,861 and the urban population stands at 5,73,741 of this the total population of Mokokchung district is 1,93,171 and the rural population is 1,37,518 and the urban population is 55,652. The population of Mokokchung district covers 10% (Fig.3.1) of the total population of the state with the highest being Dimapur with 19% and the lowest is Longleng district. Mokokchung ranked 3rd with Tuensang in percentage wise of the population in the state but in total

wise Mokokchung is ranked at 4th place behind Dimapur, Kohima and Tuensang districts. This shows that the trends of population in the district is static with no abnormal increase rather there was a decline in population in the last decade.

Fig 3.1: District wise population, 2011



Source: Provisional Census 2011

The district has witnessed drastic population shift in the past few decades. The rate of infant mortality and birth rate is attributed to the growth of population. From 1971 the population is increasing at a faster rate and it has shot up in 2001 census but this data was rejected by the govt. The district as well as the state is dominated by overwhelming majority of tribal population. The other people are from the community of Nepali, Marwari, Bihari, Punjabis, Bengali, and Southern Indian and from neighbouring seven sister states. The population growth of Mokokchung district is steadily growing with +28.02% 1971 to +52.00% in 1991 which is considered as the transition period of movement of people from other states mostly illegal immigrants

also known as ‘Mias’ and apart from 2001 census which was rejected by the government due to inaccuracy the population growth has declined to -16.77% in 2011 which indicates the low growth in birth rate and also the influx of migrants both legal as well as illegal has reduced tremendously due to the effect of the ‘Survival 2007’.

3.2.1 Sex composition

The overall sex-ratio for the district in 1971 was 835 females for every 1000 males. This is significantly lower than the state figures of 872 females per 1000 males (Table 3.2). In the urban area, the ratio is 417 and in the rural areas it is 961.

Table 3.2: Sex composition of Mokokchung district and the decadal growth rate in %

| year | Male | Female | Total Population | Sex-ratio(Females per 1000 Males) | Density(per Sq.km) | Decadal growth rate % |
|------|---------|---------|------------------|-----------------------------------|--------------------|-----------------------|
| 1971 | 88,256 | 79,689 | 168,819 | 835 | 20 | +28.02 |
| 1981 | 54,648 | 49,545 | 1,04,193 | 907 | 65 | +25.84 |
| 1991 | 82,823 | 75,551 | 1,58,374 | 912 | 98 | +52.00 |
| 2001 | 118,428 | 108,802 | 2,27,239 | 919 | 141 | +43.48 |
| 2011 | 100,229 | 92,942 | 1,93,171 | 927 | 120 | -16.77 |

Source: Directorate of Economics & Statistics, 2011

The sex-ratio tends to vary inversely with the rate of growth of population, i.e. the greater the growth rate, the greater the mobility of people; and the greater the mobility, the lower the ratio.

3.2.3 Levels and trends of Mortality

Over the last four decades the mortality rate of infant has been reduced due to better health facilities and proper hygienic care which has affected the growth of population. In the past decades health and family welfare was not looked after by the government as well as by the people in the state. Mokokchung district was having the first dispensary in 1889 which was gradually upgraded to a hospital in 1908. But in due course of time primary health centres are being set up in almost all the villages in the state subsequently, various dispensaries were set up in major wards and blocks in the district.

That mortality has brought changes in the population scenario and creates demographic transition in the state. The main cause for the increase in infant mortality is due to negligence of the parents where dependence on medical is the last option. In many cases, most of this infant mortality occurs in rural areas where health facility is located far from their villages and to get to the hospital takes the whole day. As compared with the rural areas the urban population does not have that much of mortality. The main reason is easy access to hospital and medical care centres. To curb the infant mortality the most important task is to have good health facilities in all the rural area as the majority of the population is concentrated in remote rural areas.

It is important to know the natural rate of population growth which can be defined as

$$P_n = (\text{crude birth rate} - \text{crude death rate}) / 10$$

Where P_n is interpreted as an annual percentage change, the crude birth rate is the number of live births per 1,000 populations and the crude death is the number of death per 1,000 population.¹

By using the formula's given above it can be seen that the natural rate of population growth P_n calculated in table 3.3 is often different from the actual population growth shown in table 3.2. The natural rate of population growth thus understates the actual trend of population of the district. in 2006 the crude birth rates(CBRs) of Mokokchung district is 26.73 and the crude death rate (CDRs) is 4.63, the natural rate of population growth was $P_n=(26.73-4.63)/10=2.21\%$.

Table 3.3: The natural rate of population growth of Mokokchung district

| | CBR | | | | CDR | | | | P _n % | | | |
|------------|-------|-------|-------|-------|------|------|------|------|------------------|------|------|------|
| | 1977 | 1987 | 1997 | 2006 | 1977 | 1987 | 1997 | 2006 | 1977 | 1987 | 1997 | 2006 |
| Nagaland | 14.44 | 17.99 | 18.00 | 29.17 | 5.16 | 3.59 | 1.95 | 4.49 | 0.92 | 1.44 | 1.60 | 2.46 |
| Mokokchung | 24.16 | 6.68 | 12.40 | 26.73 | 6.97 | 1.68 | 2.02 | 4.63 | 1.71 | 0.5 | 1.03 | 2.21 |

Source: Directorate of economics & Statistic, 2011

Whereas the actual growth rate of Mokokchung district is 43.48% in 2001 shows that the growth of population in the district is also by the impact of immigrants into the district. By using the formula we can define the actual rate of population growth p_a as

$$p_a = p_n + m$$

where m is net migration=(immigrants/100 population)-emigrants/100 population) and p_a also interpreted as a percentage.(Cypher & Dietz,2004).

This helps us in studying the outflow and inflow of migrant in the district.

When there is high level of emigration relative to immigration the natural rate

of population growth p_n , will overstate the actual rate of population growth p_a . (Cypher & Dietz,2004).

3.2.4 Flow of Migration

From the ancient times people migrated from one place to another in search for better livelihood and this flow of people has brought changes in the social structure as well as the economy of an area. According to Sengupta, 2004, “overcome the constraint of environmental resistance due to growth in the density of population in two ways other than technology development in a closed system-(a) migration and (b) trade across region”. Societies grow when people from different parts of the region migrates thereby bringing their own socio-cultural and customs with them. Population mobility is bound to increase with the growth of trade and commerce and industrial development. Such movement could be mere commutation, circulation or change of place of residence. Though traditionally the Naga people have maintained their cultural integrity and identity by having socio-economic barriers with the people living in the border or vice versa, the recent developments indicate that changes are taking place and the society is no longer as closed as it was in the past. Migration from outside the region has been an important factor in this process and in Mokokchung town, the figures were 15.5% in 1961, which has recorded a sharp rise to 31.1% in 1971. The non-Naga population in the district constitutes more than 21% (Planning Department, Govt. of Nagaland). Thus during the last decade migration from outside Nagaland has

increased significantly, the increase being particularly pronounced in the urban and industrial activities chiefly concentrated in Mokokchung Town, Tuli Town and Changki belt. Most of the migrants had some special training for the urban occupations, particularly in the services and trade and commerce. Extra activities like forestry or forest-and agro-based activities also offer suitable scope of employment.

The rural to urban migration of the regional Naga population is also quite large. Excluding the estimated non-Naga population in the Mokokchung town, it is observed that the native population in the town has increased from 5207 in 1961 to over 12000 in 1971 registering a net increase of over 130%. With the limited number of sizable urban areas in the region, both existing and potential it is likely that the rural-to-urban migration in future will be quite large. Migrations of people from towns and villages has rendered the town to a fast changing landscape such as unplanned settlement, poor drainage, dirty and polluted streams. High growth of population in the district has brought tremendous changes in the socio-economic development as ‘Population, no matter whether as the main body of production or that of consumption, is an element that can never be ignored in the development of industrial and agricultural production.’(Wang Xiangmin, 1994) pressurizing the land-holding and exceeding the carrying capacity of the land, “The topography and types of soils are determining factors in land use patterns” (Davenport, 2003).

Migration is defined as a permanent change of residence, at least for one year and involves crossing of administrative boundary, while circulation refers to short-term movements, repetitive or cyclical (Zelinsky,1971, Kayastha, 1998). Census question cannot capture circular immigration. Therefore some of the immigrants as well as migrants outside the region are classified as intrastate/region migrants (A.Sebastian, 1986).

Migration concerns individual and that the flow of migration will gain both the host country as well as the migrants (Oberg, 1995) but it happens at a large scale that the host country faces problems such as densely populated areas, labour surplus, landless labourers, underprivileged socio-economic conditions and local exploitation (kayastha, 1998).

The issues of immigration has also affected the state of Nagaland in general and Mokokchung district in particular because the district is pre-dominantly a tribal district with Ao being the major tribe though Nagaland is the only state in the northeast India where immigrants exceeded the number of immigrants from outside the region(A.Sebastain, 1986). The census data shows the high increase of schedule tribe (ST) population in the district which comprises the tribes of the state with Ao being the major tribe in the district which indicates that immigrants are high in the state as table 3.4 shows.

Table 3.4: Schedule Tribe population of the state and the district

| year | Nagaland | Mokokchung |
|------|----------|------------|
| 1971 | 457602 | 1,53,601 |
| 1981 | 650885 | 95,407 |
| 1991 | 1060822 | 1,46,717 |

Source: Directorate of economics & Statistics, 2009

The 1981 census shows a decline of ST population to 95,407 in Mokokchung district because till that time Zuneheboto and Wokha districts were amalgamated under the district administration of Mokokchung district. However, there was a sharp increase of ST population to 14, 6717 persons in 1991. This increase in ST population is mostly due to the intra- immigration from different districts of the state and also due to high birth rate and low death rate. The district which is thought to have high growth of population was blamed to the influx of illegal immigrants from other states. The Ao Kaketshir Mungdang (AKM), the apex body of the Ao students community of the district took measures to curb the influx of illegal migrants. But one interesting fact is that, the presence of immigrants does not affect much in the rise of population growth in the district, also, one of the reasons for the measures taken to check their authenticity to settle in the district was their monopoly on the economy.

3.2.5 Trends of Population growth

Any region that comprises of a particular tribe or clan is the dominance in the society, economy and the political development of the region. The

population of Mokokchung district comprises of section of people from mainland India, from the neighbouring states and from the other districts of the state but of all these the dominance populace is the schedule tribe (ST) which makes up 90% of the population of the district. According to 2011 census Mokokchung town is declared as the only urban area in the district and other 9 areas are declared as rural areas.

According to 1981 census the density of population of Mokokchung was 65 against the state density of 47. The overall population of the district was 1, 04,193(1981 census) as shown in Table 4.5. High concentration of population is witnessed in the rural areas and Ongpangkong circle has the highest concentration of population as it is located near the main town with the total population of 25,970 where as the main town has only 18,060 population. The largest circle is the Ongpangkong circle and it has 21 villages under it.

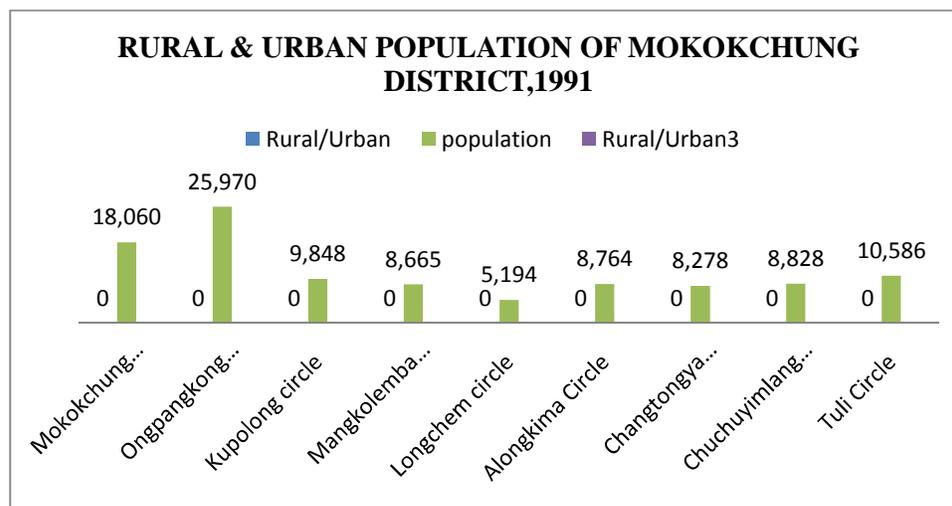
The lowest population in the district is recorded at Longchem circle even though there are 14 villages under it. The reason is that most of these villages are migrated from other villages, except Lakhuni and area wise is also small comparing with other circles. The Scheduled tribe population is the majority and this shows that non-Nagas are the minority in the district with 8786 persons only. The migrations of population from other states were marginal in the 1980s.

Table 3.5.Circle-wise population of Mokokchung District

| District/circle | No. of Villages in the Circle(2011 census) | Rural/Urban | 1981 | 1991 | 2001 | 2011 |
|----------------------|--|-------------|----------|---------|--------|--------|
| Mokokchung Town | 18 | Urban | 18,060 | 24,803 | 29332 | 34432 |
| Ongpangkong Circle | 21 | rural | 25,970 | 38283 | 50868 | 45824 |
| Kopulong Circle | 10 | rural | 9,848 | 14167 | 21112 | 12330 |
| Mangkolemba Circle | 13 | rural | 8,665 | 12,128 | 20966 | 12950 |
| Longchem Circle | 16 | rural | 5,194 | 9151 | 12849 | 8581 |
| Alongkima Circle | 10 | rural | 8,764 | 9618 | 20185 | 11952 |
| Changtongya Circle | 9 | rural | 8,278 | 12,975 | 22878 | 7530 |
| Chuchuyimlang Circle | 11 | rural | 8,828 | 18273 | 23023 | 17790 |
| Tuli | 21 | rural | 10,586 | 19,238 | 26603 | 21513 |
| Merangmen Circle | 10 | rural | ----- | ----- | ----- | 5424 |
| Total | 109 | | 1,04,193 | 158,636 | 227817 | 193171 |

Source: Nagaland Statistical Census, 2009

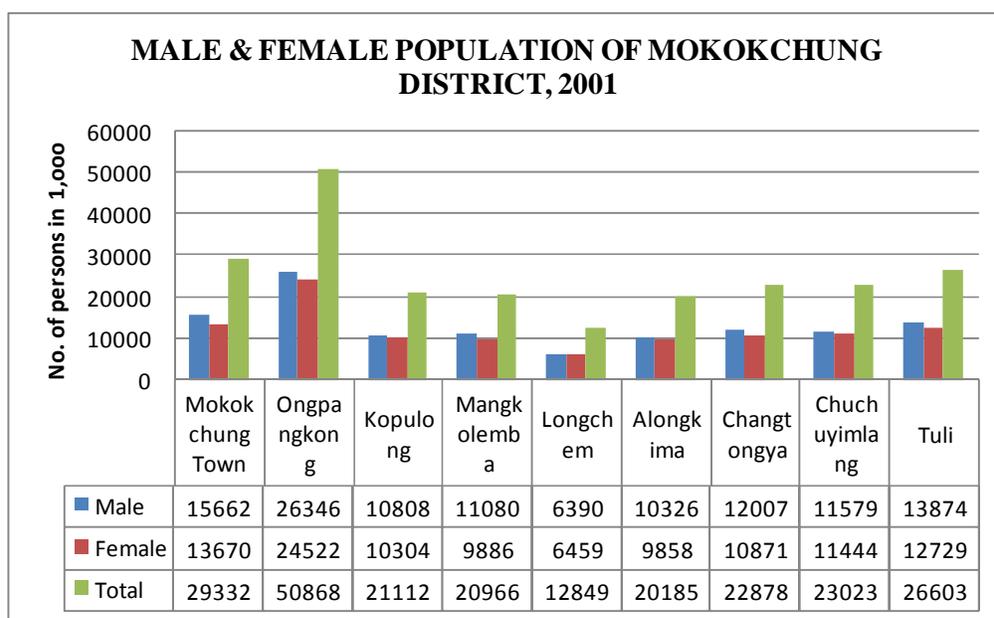
Fig 3.2: Circle-wise population of Mokokchung district 1991



Source: Nagaland Statistical Census, 1991

Fig: 3.2 shows an increase in the 1991 census population in the urban/rural sector with a population of 1, 58,374 (1991 census). The highest in Ongpangkong circle with a population of 38,283 persons which is 1.47% increased from the last decade and higher than the town population of 24,803 persons.

Fig 3.3: Circle-wise population 2001

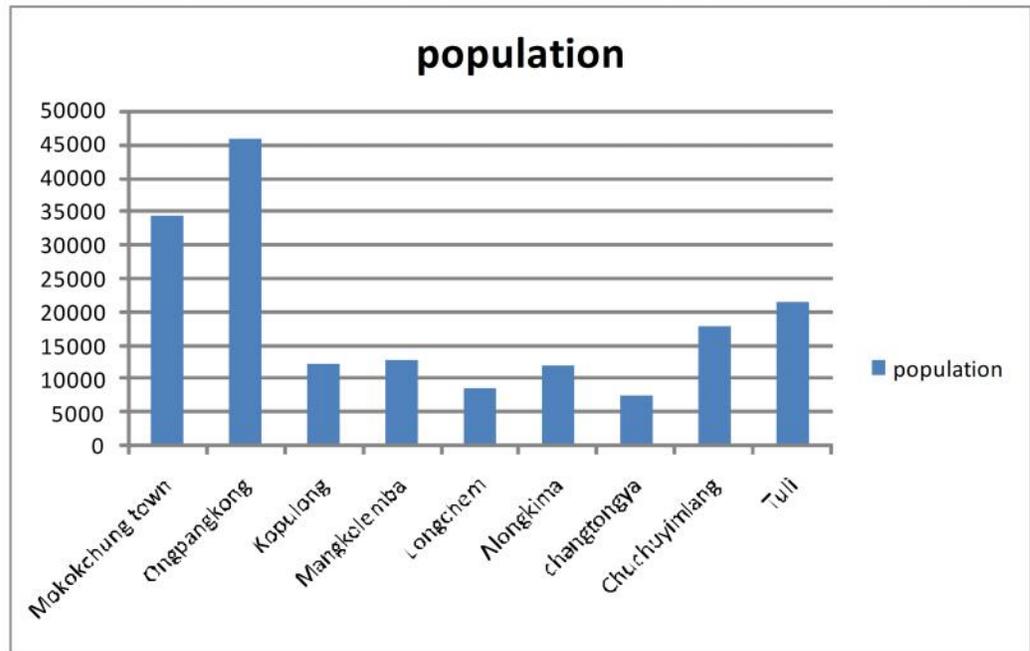


Source: Nagaland Statistical Census, 2001

The census 2001 shows a high increase of population with a decadal growth of 46.54 for 1991-2001 as reflected by fig.3.3. Over the years Ongpangkong circle has witnessed an increase of population and the lowest in Longchem circle. This growth of population has been attributed to the influx of illegal immigrants. However, one of the main reasons behind this increased was to have a high number of electoral votes. In view of this extreme growth of population the AKM has initiated the ‘Survival 2007’ to check the authenticity of the illegal immigrants. It is revealed that there was a drastic

declined in the district population of 2011 with 193,171 persons and percentage in decadal growth is -16.77 for 2001-2011 (Fig.3.4).

Fig 3.4: Circle-wise population of 2011



Source: Nagaland Statistical Census, 2001

The highest is in Ongpangkong circle with 45824 with a decadal growth of -11% which shows a mark decreased in the population of the district and the lowest is in Changtongya with 7530 persons.

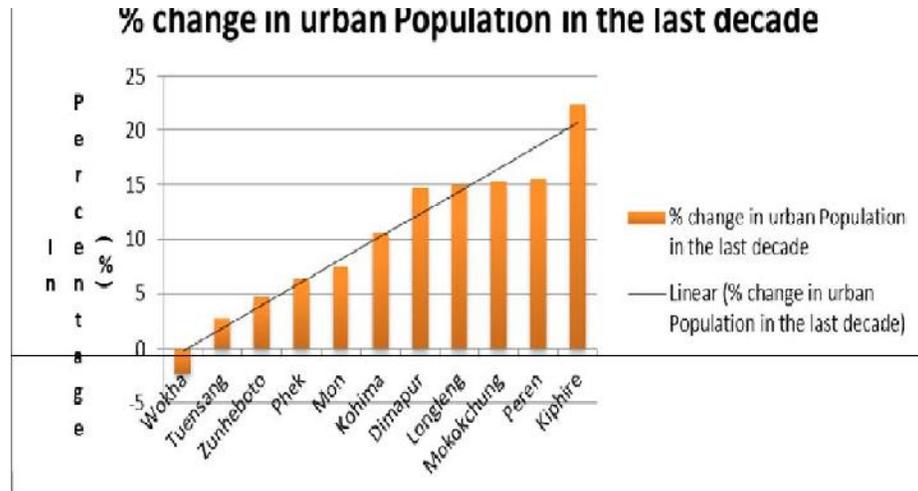
There is a sharp declined of population in all the circles which raise serious questions about the authenticity of illegal immigrants. Being near the border with Assam, Tsurangkong range and Tuli plain the migrants enters the bordering villages and works as helpers in the paddy field, but these migrants are seasonal-workers who came easily to the range and went back to their place after the works are finished. Thus their movement could not be checked due to

difficulties in the region and the difficult terrain. But it is the villagers who invited them to work in the field because of lack of workers in the village due to low population. Also the non-local workers are more adapted to work in the plains and their pay is less than the local workers. Thus in almost all the paddy fields such as Tsurang, Meramen, Tuli, Changki Valley, Akhumen, Melak plain one can see the non-Naga labourers toiling in the fields.

3.2.6 Future trends of Population growth

The Department of Urban Planning, Nagaland has projected the future trend of population growth of the districts. It outlines the projected population growth particularly in relation to the already growing concerns of urban population. The projection of growth of population in urban centres, based on economic development, growth strategy clearly indicates a huge population in urban centres, but also indicates that the already growing concerns of urbanization could further multiply (Urban Planning Development, Report, 2011).

Fig.3.5: Change in Urban population in the last decade



Source: Urban Planning, Nagaland, 2011

Fig.3.5 shows the changes in the urban population and of this Wokha has the lowest below -2.30 whereas Mokokchung district has increased steadily upto 15.36% mark which is higher than Kohima and Dimapur which hover between 10-15% marks. Interesting fact is that Kiphire urban population has increased tremendously to 22.28%.

In the last five decades from 1971-2011 the population of Mokokchung district has increased by 39,570 which is an increase of 20.48%. But the projection done on the future population growth is much higher as shown in table.3.6 with an increase of 4, 73120 persons within the five decades i.e. from 2011 to 2051 which is an increase of 71% population growth.

Table 3.6: Decadal Population growth trends

| District | Population as per Census | Projected Population | | | |
|--------------|--------------------------------|----------------------|----------------|----------------|----------------|
| | | 2011 | 2021 | 2031 | 2041 |
| Mon | 250671 | 363473 | 508862 | 712407 | 997370 |
| Mokokchung | 193171 | 260781 | 352054 | 492876 | 665382 |
| Zunheboto | 141014 | 211521 | 317282 | 475922 | 666291 |
| Wokha | 166239 | 260781 | 260781 | 260781 | 352054 |
| Dimapur | 379769 | 363473 | 363473 | 363473 | 490688 |
| Phek | 163294 | 236776 | 355164 | 479472 | 623314 |
| Tuensang | 196801 | 295202 | 428042 | 577857 | 809000 |
| Longleng | 50593 | 63241 | 82214 | 102767 | 128459 |
| Kiphire | 74033 | 96243 | 125116 | 168906 | 219578 |
| Kohima | 270063 | 364585 | 473961 | 639847 | 863793 |
| Peren | 94954 | 123440 | 160472 | 216638 | 281629 |
| Total | 1980602 | 2639516 | 3427420 | 4490945 | 6097558 |

Source: Urban Development Planning, Nagaland, 2011

The district with an area of only 1,615 sq. kms this mammoth increase in population as shown by the projection will put immense pressure on the carrying capacity of the land. The lack of development both in the rural and urban sectors will bring lots of hardship on the denizen of the district.

3.3 Population growth and its affect on economic development

The problems of economic development are always associated with population growth and the assessment of better economic amenities is based on the rate of population growth. The growth of population is attributed not only to high birth rate and low death rate but also to the influx of migrants

into a particular town or area. The increase in population also leads to unemployment in the secondary and tertiary sectors which affects the socio-economic disparity in the society. The needs for better economic development has made the people realize the importance of education; to uplift the lower section of the society; to uplift the weaker sections i.e., female; to reduce the male-female ratio in the society.

Growth rate of population and the growth of the labour force affect the level and pace of economic growth and development. The pace of human capital accumulation itself and the need for development is achieved through 'the expansion of real freedoms that the citizens enjoy to pursue the objectives they have reason to value, and in this sense the expansion of human capability can be, broadly, seen as the central feature of the process of development' (Sen and Dreze, 1999). The freedom to decide their own future helps in shaping the society and also to make a life of their own. The increase in population, need for raw materials, market facilities, transport and communications are some of the features that shape the economic development of the society which ultimately lead to urban type of settlement; Mokokchung has also witnessed a similar kind of scenario as it transformed from a semi-urban town into a major metropolitan town in the state.

3.3.1 Population growth

Nagaland has witnessed high growth of population with the highest decadal growth of 56% (1991). In spite of this high growth of population the state

does not have any major economic undertakings and the primary occupation of the people remains agriculture, and the financial income remains through funds from the central government. This is one of the main problems that the state is facing. The state is rich in natural resources like forest products and minerals but these resources have remained unexploited for a variety of reasons. Firstly, the unsolved political issues in Nagaland have discouraged the private investors from investing in the state. Secondly, in Nagaland the land and its resources are under the control of the respective village authority. Therefore, faced with a conflict situation due to unsolved political problem, lack of investment from outside, and lack of proper government policy in utilizing the land and its resources, the economic development of Nagaland or for that matter, Mokokchung, has been more or less stagnant.

Under such circumstances, population growth has brought adverse affect on the economy of the district. The expansion of human capabilities can clearly be enhanced by economic growth (Sen and Dreze, 1999).

Like any other economies of the world, agriculture remains the backbone of the economy and it is the main source of sustenance for the people of Mokokchung district. Earlier, the farmer practiced traditional method of agriculture, but nowadays, with the advancement of technology and also subsidies from different quarters available to the farmers, the villagers are practicing different agricultural activities and have also started establishing their own private business enterprises. However, despite all this, the agriculture sector in Nagaland is unable to meet the food grain demands of its

population and the state is dependent on imports from other Indian states. In 1971 census, the number of villages was 91 with total household of 10,458 which has increased to 102 villages (2001 census). The figure shows a high growth rate of population within a span of three decades. The most important effect of high growth of population is unemployment. The pressure of growing human population has been mitigated not only by the migration of population but by direct or indirect import-export of natural resources from one ecosystem to another (Sengupta, 2004).

3.3.2 Literacy

Mokokchung district is considered to be one of the most educated and advanced districts in the state. Since the attainment of statehood, schools and colleges were given priority that even students from other districts used to come to study in Mokokchung so much so that the Impur Christian School, Mayangnokcha High school and Fazl Ali College of Mokokchung became the premier educational institutions in the state. Educational institutions were first established by the American Christian missionaries during the early 1870's; these missionaries spread the gospel of Christianity to Naga headhunters and side by side established schools where the indigenous Nagas were educated had slowly become civilized. This shows that education in the state is quite recent but within the last few decades the literacy rate of the state has increased tremendously. Nowadays, Naga parents give much importance to education of their children by sending their children to schools

rather than make them work in the fields. At one point of time much preference were given for the sons education rather than the daughters, as the data shows. However, this trend is changing now. The literacy rate between male and female had a wide gap as females were made to do all the household chores and made to look after their siblings rather than attend schools. However, with the passage of time, parents began to understand the importance of female education and equal importance were given to both male and female education, ultimately the wide gap between the male and female literacy rate has been reduced to some extent.

Table 3.7 shows the steady increase of literacy rate in the state as well as the district; the overall percentage is that the district literacy rate is higher than the state which shows that the people in the district have opted for education from long time back. But there was a dismal fact where female literacy rate is concerned. Even in 1991 census the gap between male and female literacy rate was 5.65%.

Table 3.7: Literacy rate in Nagaland and Mokokchung

| | 1971 | | | 1981 | | | 1991 | | |
|------------|---------|-------|--------|---------|-------|--------|---------|-------|--------|
| | persons | male | female | persons | male | female | persons | male | female |
| Nagaland | 27.40 | 35.02 | 18.65 | 42.57 | 50.06 | 33.89 | 51.09 | 56.05 | 45.52 |
| Mokokchung | 38.15 | 45.71 | 29.82 | 61.78 | 65.95 | 57.18 | 68.54 | 71.24 | 65.59 |

Source: Directorate of economics & Statistics, 2001

Till the last few decades there was wide gap between male and female literacy rate, as in 1971 there was a gap of 15.89% in the district which

happened to be the most developed district at that time. But in 1981 it has been reduced to 8.77% which is a great boost in female education. Gradually the gap between male and female literacy rate has declined in 2011 with only 1.81% which is much lower against the 6.6% gap of the state as shown in table 3.8.

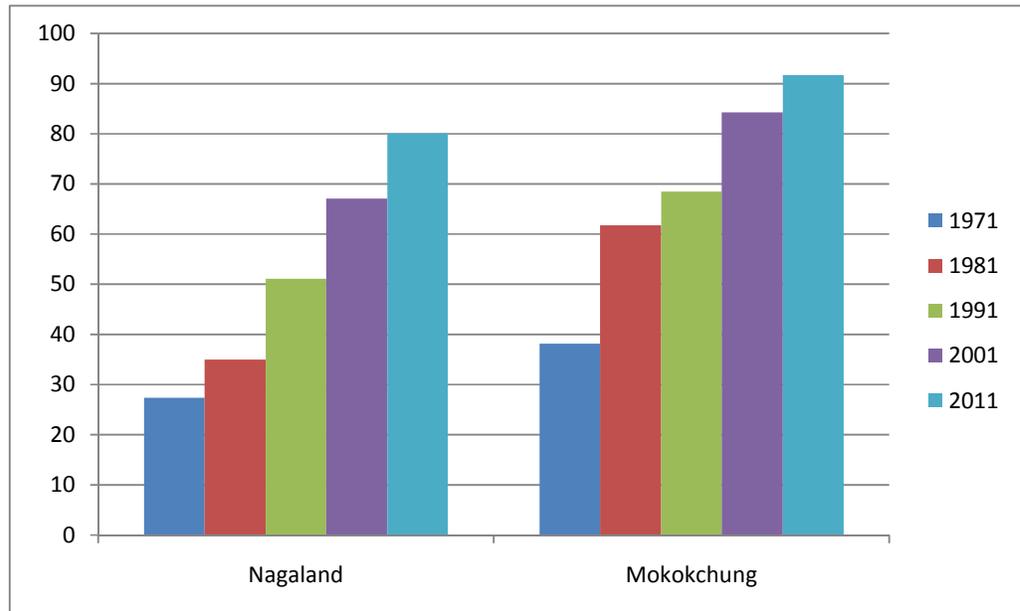
Table 3.8: Literacy rate in Nagaland and Mokokchung

| | 2001 | | | 2011 | | |
|------------|---------|-------|--------|---------|-------|--------|
| | persons | male | female | persons | male | female |
| Nagaland | 67.11 | 71.77 | 61.92 | 80.11 | 83.29 | 76.69 |
| Mokokchung | 84.27 | 86.14 | 82.20 | 92.68 | 93.55 | 91.74 |

Source: Directorate of economics & Statistics, 2011

Fig 3.6 shows the state and district literacy rate where the district exceeds the state literacy rate in all the decades, revealing that the people of the district have given much emphasis on education from the early days. The 1971 data of the district include the districts of Zunheboto and Wokha thereby showing the high literacy rate over the state. It is heartening to see the high rate of literacy both in the state as well as the district. However, this high rate of literacy has also lead to high rate of unemployment in the society.

Fig 3.6: Literacy rate of the state and the district



Source: Directorate of economics & Statistics, 2011

The main reason for unemployment in the society is that the people rely much on the white colour job rather than employment in the private sector for their livelihood. The job opportunities in the government sector have been saturated and the state government cannot take in more manpower in its different departments. Moreover, there are no employment avenues for the educated unemployed youths in the private sector due to lack of big industries or other private business establishments in the state. A prominent businessman of Mokokchung town has commented that ‘the youth of the district and the towns are creating self-unemployment’ which may be true; but looking at the present scenario the market value of the state and the district is very small as compared with other states making it difficult to start business establishment even though the state is rich in natural resource, forest resources, petroleum and natural gas. Another problem faced by the state is

the means of transport and communication, because the bad road condition of the district makes it difficult to transport the goods to other markets thus hampering the people to compete with the other states.

The ever growing population in the district with higher literacy rate demands the society to give better job avenues for the ever growing unemployment youths in the district. The demand for white collared job won't suffice all the educated people in the district as well as the state. After the 'Survival 2007' initiated by the Ao Students' Conference (AKM) against illegal Bangladeshi migrants in the district, there was a huge vacuum in the business sector in the town since the Bangladeshis, who were mostly businessmen, were chased out of the town. To fill this vacuum in the business sector, many educated youths in the district have decided to evolve in private business, and today some of them have become successful businessmen in the town. However, to start a business enterprise, it is imperative to have financial assistance from funding agencies so that they young entrepreneurs can invest in the exploiting the rich natural resources available in the district which has ultimately elevate the economic condition of the people in the district to certain extend. In this regard, it is heartening to note that a lot of nationalized banks like the SBI, Axis Bank, ICICI, IDBI, Vijaya Bank and Allahabad Bank have started their branches in the Mokokchung district headquarters. Most importantly, the State Bank of India has opened a regional office branch in the town to look after six districts in the state. Looking at all the developmental trends in the district during the past few years, the changes can be attributed to the rise in

population, the emergence of a young dynamic entrepreneurs and the scope of the district to become an economic hub in the state in the days to come.

Chapter 4

Social and economic structure of Mokokchung District

4.1 Introductory Statement

Mokokchung district is basically an 'Ao' speaking district and it is an important region for commercial purposes. The growth of population, lack of economic development, social injustice and poverty affects the social and economic structure of this district. Rural and urban societies differ in terms of their value system and patterns of social behavior which is 'differentiated in terms of the degree of social heterogeneity'. Urban areas have a substantiate proportion of new migrants. Their population consists of people coming from different regions, speaking different languages belonging to different faiths. The difference in social heterogeneity shaped the urban-rural societies and also the settlement (Ramachandran, 1989:103).

The district is inhabited by the tribal community which shapes the society and their economy is also linked with the environment they reside. The social infrastructure is based on the tradition and culture of the people of the district and all types of developmental activities are carried out with consultation with the village councils. Compared with the other tribal areas of the country the land belongs to the people and it is protected by Art.371(A) by which no other forces can disrupt the indigenous people without their consent as there are large scale disposition through change in land use(Mohanty,1999) in different states in the country. Their primary source of economy is agriculture with small pockets of industries such as Tuli paper mill in Tuli and cottage industries. But all these industries get their raw resources from the forests they inhabit which shows the close link between the society and environment.

Also the villagers are the sole owners of the forest and they decide what to do with the land and how to utilize it, the utilization of land is restricted by the socio-cultural constraints which hinder farmers from fully exploiting the carrying capacity of the land (Heilig .k., 1995:215). The district is an agricultural area and people emphasis much on the land and the product from it. The system of barter economy exists till the last few decades, but now the importance of income has made the people realize the needs for saving. Nothing in the world is free (Heilig .k., 1995), as the implementation of advanced agricultural technology and the expansion of agricultural areas into previously unused land is costly (Heilig .k., 1995). However still in the rural areas the income generation from their field is not sufficient enough to meet their income as whatever crops they grow is mostly for their own consumption and also the prices for their crops are not high to compete with the goods brought from the neighbouring states.

Such is the problem faced by the people even though they are self-sufficient. In order to understand the social and economic structure of the district, it is important to study the rural and urban settlements; the different types of settlement in the district, housing type and what made the people to settle in a specific area; economic base and social infrastructure: the economy of the district, how developed the district is, the trend of population growth and the social infrastructure of the district such as water and power ,drainage and sewerage, role of women in the society whether women has equal parts in the society or not and transportation; agricultural, household firms and poverty:

agricultural practices of the district, how economical it is for the villagers and whether it is profitable for the people, the household firms such as the land holding, rights of the people and poverty. The study of the selected sampled villages of the district helped in understanding the socio-economy of the people of the district. Socio-economically the district is a developed region compared with the other districts and it is important to understand the settlement patterns of the district.

4.2 Rural and Urban Settlement Patterns

The district wise urban rural divide of population in Nagaland was 82.77% rural and 17.23% Urban in 2001, while the urban population increased to 28.97%, the rural population decreased to 71.03%.The following table 4.1 gives an overview of district wise – Urban – Rural population and a comparison between the urban-rural divide in 2001 versus 2011.

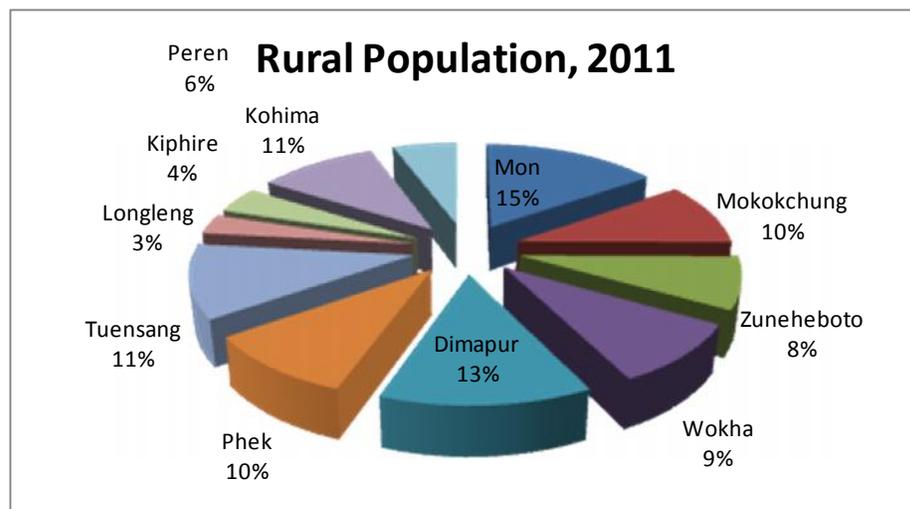
Table 4.1: A District wise Comparative Decadal growth of Rural-Urban Population

| District | 2001 Census (In %age) | | 2011 Census (In %age) | | Increase or decrease in urban population in the last decade In %age |
|------------|--------------------------|-------|--------------------------|-------|--|
| | Rural | Urban | Rural | Urban | |
| Mon | 93.64 | 6.36 | 86.15 | 13.85 | 7.49 |
| Mokokchung | 86.55 | 13.45 | 71.19 | 28.81 | 15.36 |
| Zunheboto | 85.07 | 14.93 | 80.42 | 19.58 | 4.65 |
| Wokha | 76.66 | 23.34 | 78.95 | 21.05 | -2.30 |
| Dimapur | 62.81 | 37.19 | 48.05 | 51.95 | 14.76 |
| Phek | 91.32 | 8.68 | 84.93 | 15.07 | 6.39 |
| Tuensang | 83.99 | 16.01 | 81.28 | 18.72 | 2.71 |
| Longleng | 100.00 | 0.00 | 84.96 | 15.04 | 15.04 |
| Kiphire | 100.00 | 0.00 | 77.72 | 22.28 | 22.28 |
| Kohima | 65.01 | 34.99 | 54.40 | 45.60 | 10.61 |
| Peren | 100.00 | 0.00 | 84.41 | 15.59 | 15.59 |

Source: Census of India 2011

Mon has the largest rural population of 2, 15,953, comprising of 15.35% of the total rural population of the state (Fig.4.2).

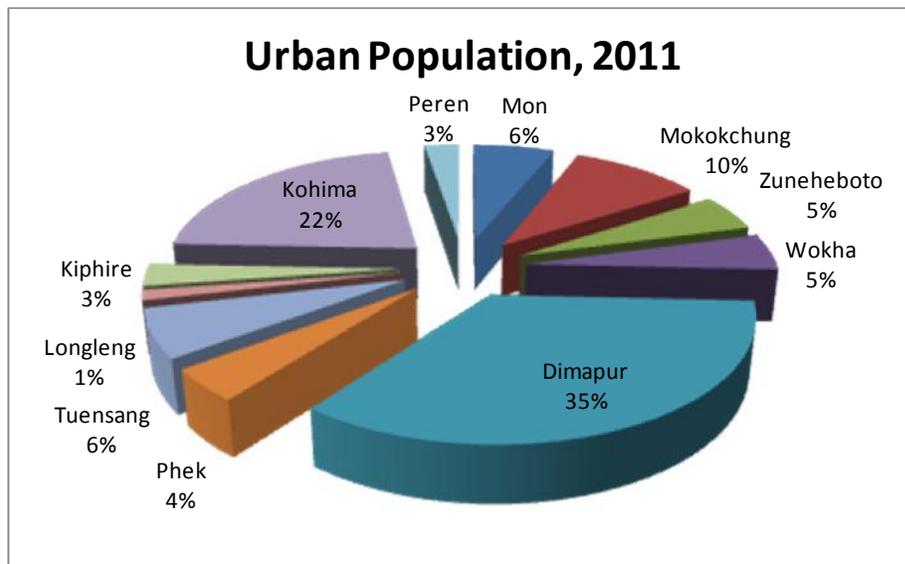
Fig.4.1: Distribution of rural population in Nagaland, 2011



Source: Census of India 2011

The lowest rural population of 42,984 and urban population of just 7,609 are both recorded in Longleng district, accounting to just 3.06% of the total rural population and 1.33% of the total urban population of the state respectively (Fig.4.2). Dimapur district has the highest urban population with 1, 97,277, comprising of 34.8% of the total urban population of the state and also the 2nd highest in the rural population of 13%. The urban population of 2011 shows the rank hold by Mokokchung district in 3rd place though the total population is lesser than Tuensang district.10% of the total urban population is found in Mokokchung urban areas comprising of the five sub-towns of the district. It is been found that the higher the urban population the more developmental fund to the areas for urban development and Mokokchung district does receive more developmental fund than other districts with low urban population.

Fig 4.2: District wise Urban Population, 2011



Source: Census of India 2011

Most of the population is concentrated in the 9 circles with one main headquarter of the district having eighteen wards that makes up the town profile. The total population percentage of the urban area in the district is 28.81(2011 Census) as shown in table 4.1 which is an increase from 13.45 in 2001 and the rural population percentage is 71.19(2011 census) which has declined by 15.36% to that of 2001 percentage of 86.55.

Overall the percentage of the district urban population was higher than the state in 1971 census which was 10.35 against the state percentage of 9.95 and in 1981 census the urban population is higher with a percentage of 17.62 in the district against 15.50% in the state indicating that Mokokchung district was one of the major urban area in the state as most of the other districts has their concentration of population in the rural areas. Rural development are aided by the Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (MGREGA), where projects such as rural connectivity, water conservation and water harvesting, renovation of traditional water bodies, irrigation canals, land development and other works are carried out in all the circles and blocks as shown in table 4.2.

Table 4.2: No. of works under MGREGA in Mokokchung district

| S. No | Block | Rural connectivity | Water conservation & water harvesting | Irrigation canals | Land development | Other works | Total approved work |
|-------|----------------|--------------------|---------------------------------------|-------------------|------------------|-------------|---------------------|
| 1 | Changtongya | 17 | 0 | 0 | 0 | 0 | 12 |
| 2 | Chuchuyimlang | 49 | 6 | 0 | 5 | 8 | 14 |
| 3 | Kubulong | 0 | 0 | 0 | 0 | 0 | 12 |
| 4 | Longchem | 27 | 0 | 0 | 0 | 2 | 16 |
| 5 | Mangkolemba | 151 | 15 | 1 | 3 | 14 | 12 |
| 6 | Ongpangkong(N) | 39 | 0 | 0 | 0 | 4 | 12 |
| 7 | Ongpangkang(S) | 1 | 1 | 0 | 0 | 3 | 14 |
| 8 | Tsurangkong | 115 | 0 | 0 | 6 | 60 | 20 |
| 9 | Tuli | 64 | 4 | 0 | 1 | 16 | 21 |
| 10 | Total | 463 | 26 | 1 | 15 | 107 | 133 |

Source: MGREGA, 2012

Tsurangkong and Mangkolemba has the highest number of schemes under the MGREGA though the total approved work as distributed equally among all the blocks except, Tuli which has the highest approved work of 21 followed by Tsurangkong with 20 and Longchem with 16. The majority of the works carried out in this scheme is on rural connectivity and it has brought lots of changes in the rural development and better connectivity with the rest of the district and other districts.

3.3 Trend of rural - urban growth

Most of the villages in the state as well as the districts are located on the hilltops and it has linear and compact type of settlement. But at present due to the growth of population the settlement patterns has change spreading out from the compact zone out on the fringe of the villages. Small patterns of settlement crops up and this is mainly due to the scarcity of land in the villages as well as economic and social factors. Villages on the Tsurang river basin bordering Assam such as Lakhuni, Waromung has started new villages in the valley because of the fertility of the soil. It is found that Lakhuni village under Japukong range has a new village which is formed under the direction and the rule laid down by the village council. It said that, any citizen from the village can settle in the new village and demarcate their land from their clan property. Mokokchung district is having various villages which are falls into different circles and blocks with the main town in Ongpangkong range which has the main district headquarter and Tuli town located in the northern part of the district.

Table 4.3: Percentage of the Distribution of Urban population

| | 1971 | 1981 | 1991 |
|--------------|-------|-------|-------|
| Nagaland % | 9.95 | 15.50 | 17.28 |
| Mokokchung % | 10.35 | 17.62 | 15.77 |

Source: Directorate of Economics & Statistics, 2011

The ratio of rural–urban population has changed from 8.52 in 1961 to 3.75% in 1971 (Table 4.3) primarily due to commercialization and urbanization which has lead to migration from the rural to the urban sector. The population

growth for the urban areas will be accounted for at the compound rate of 7.8% as compared with 2.1% of the rural population. Most of the increase in urban population is through migrational growth by the inflows of new migrants and indirectly by the natural increase of the migrants. The patterns of population growth is that urban population is increasing rapidly whereas rural population is decreasing though rural population is higher in all the districts of the state. As shown in table 4.4 from 1971 to 2001 the rural population is above 80% mark but in the last decade it has decreased to 71% indicating the migration of people from rural to urban areas.

Table 4.4: Distribution of Rural population

| | 1971 | 1981 | 1991 | 2001 | 2011 |
|--------------|----------|----------|-----------|-----------|----------|
| Nagaland | 465,055 | 6,54,696 | 10,05,478 | 1,635,815 | 1406833 |
| Mokokchung | 1,50,819 | 86,133 | 1,31,571 | 1,96,026 | 1,37,519 |
| Nagaland % | 90.05 | 81.50 | 82.72 | 82.26 | 71 |
| Mokokchung % | 89.65 | 82.38 | 84.23 | 86.55 | 82.18 |

Source: Directorate of Economics & Statistics, 2011

The problems of employment has made the educated rural people to go and searched for better work opportunity but this is only a small comparison between the rural-urban population ratio. According to Saikia (1986) the reasons why the rural people who went to the urban area are hesitant to return to their villages in Nagaland are:

- *Lack of working hand in the villages*
- *Lack of skilled persons to start any profitable work*

- *Lack of ready resources in man and money as the earnings members of the rural families mostly are away*
- *Lack of informations, suggestions and plannings for any developmental scheme. For all these primary unavoidable reasons, the rural economy suffers due to the man-power planning and mobilization and on the other hand, urban areas grow more population*

In order to study the settlement patterns of the district three factors are taken into consideration: the predominant direction of growth, land characteristics and the transportation network. Mokokchung district is hilly and most of the settlements are located on the hill-top. Looking at the last few decades one can find that the predominant direction of growth has changed from north-west to north-east, principally along the Amguri Road. The means of transportation along this rugged terrain is by the road. The location of settlements in these terrains shows that the land is buildable and the terrains provides satisfactory drainage conditions. Transportation plays an important role in the development of these settlement and the roads that connect the settlements are more advanced than those which are located on the outskirts of the road. The main roads that connect all the settlements in the district are, Amguri Road, Mariani Road and Wokha Road and Tuensang road. These roads are used for transporting goods and passenger movement and also to cater local traffic for the settlements.



Plate 4.1: Different types of houses in the district

The housing pattern of the town has drastically change since the last few decades as in the past the people were accustomed to live in single family house and were not in the habit of renting the houses. This is because the materials used for the construction of the houses were of cheap materials which are available from the local natural sources (Plate 4.1). This unorganized and inadequate system of construction has created problems such as unhygienic environmental condition without adequate security and safety. The reason for the single family housing is connected with the cultural traditions of the Ao Naga society. But within one decade the town areas has witnessed mammoth growth of construction of concrete houses in every corner of the town thereby forest area around the town has also being expanded by settlement. The difficult terrain and loose soil is not suited for big multi-storeyed buildings except in selected locations. The problems of unplanned housing has created problems to the carrying capacity of the land leading to loss of lives and properties which has been witnessed in May 26, 2005 when there was a major landslide due to prolong monsoon rainfall. But the existing gross density in residential area is quite low compared to other urban areas and in hilly regions in India.

A fairly compact development is one of the fundamental policies of the future urban growth. The housing system in the town is constructed in areas which has easy accessibility to the commercial centre. The area with higher density corresponds to areas of highest market value and environmental hygiene like the areas of highest proximity to the commercial areas. The medium density

residential areas comprising of families with large number of school-going children are located with close proximity to the schools and open spaces. The lowest density residential areas correspond to areas having the divided-component family units. The household units in the urban area were 6446 in 2001 and the households have increased to 8281 in 2011. One of the major problems faced in the urban area due to unplanned housing is the road congestion which makes it difficult for the traffic to move freely. It is imperative to mention that there is free space for the movement of vehicles so as to make the town more developed. The problem of drainage system in the residential areas needs to be deal with proper care so that it does not create to health hazards and the environmental consequences.

Mokokchung district is pre-dominantly a rural region and rural settlement is at maximum with population below 1500 persons and Mokokchung town which is also the district headquarter is the only urban area though there are five sub-towns they are considered as rural settlement in the district and is under class 6 towns in India with the total population of 55,652 persons (2011 census). But some sub-urban or towns are also found in the district especially in the plain areas and these sub-towns are Tuli, Changtongya and Mangkolemba which has a population of more than 5000 persons and falls under class 7 villages in India (IRS, 2011).

The patterns of settlement on the hill-top pose lots of constraints on the development of the area mainly because of the lack of infrastructure and the difficult terrains. Most of the rural settlements are of compact type with

rectangular and linear shape, like Waromung village which has linear type of settlement from one hill top to another hill top and the main concentration of business establishment on the valley between the two hills. Waromung village is also dubbed as 'Mariani Town' by the neighbouring small villages because almost all their marketing is done in Waromung because to reach the towns is difficult due to the poor road conditions. Mongchen village is a compact type of settlement on the top of the hill and only in recent years the village has developed in terms of road which is surfaced, solar light was installed and pipe water supply to every households by the PHED. This village located on the interior of the district, though with bad road conditions and poor market facility is one of the most developed in terms of social utilities and infrastructure.

Mokokchung town which is a class 6 urban area has witnessed tremendous changes in its settlement pattern. The town used to have 9 sectors in 1961-1971 gradually it has increase to 18 wards in 2011. The major land uses are the residential use which occupies 59.70% of the total area. Defence land 13.92%, transportation 8.96% and forest area 7.05% of the total area. The reason for the large percentage of land under residential use is primarily due to uneven topographical characteristics which make it difficult to develop settlement and construct houses in close proximity to one another. Mokokchung is not a systematic planned town, nor does it have any systematic land use control. Hence, it has a pattern of mixed land use

development within the predominant land use areas which can be identified as follows:

The main concentration of commercial activity like shopping, wholesale activities and commercial offices has developed in the most accessible area i.e. around the six- point spreading along the Mokokchung- Amguri Road and the High school Road; the administrative functions are principally located on the D.C.Hill top to the eastern side of which are the residence of High Govt. officials; the public sector housing for Govt. employees from various segregated colonies like the Electrical Colony, Forest Colony, P.W.D. (New) Colony etc. Most of these are situated on the eastern and north-eastern part of the town in the fringe area; the south-western part of the town has been occupied by the Assam Rifles, where civilians are totally restricted from having any kind of developmental activity; the hospital area having the hospital, the T.B Ward and the residences of the staff is situated on the south-eastern corner of the town (isolated from the rest of the town). The residential area located on the western and southern part of the town. New residential areas have cropped up due to the high increased in population such as Mongsenpai, Lijaba Lijen, Tzusamen which are new wards created out from bigger wards for better management of their localities.

The rural-urban settlement in the district has almost the same social pattern mainly because the urban areas are created from the villages or ranges within the district and the villages has traditional right over the land as a whole.

However, when their land is sold out, that plot is no longer belong to them. Private individual or the buyer has the sole authority and has right over the land. Nevertheless most of the development activities are carried out with consultation with the villages and the decision making of the town has its root in the tradition of the villages. In order to understand the settlement pattern of the district it is important to know the factors as studied below:

3.3.1 Ownership patterns

Most of the land in the rural areas is community based land belonging to different clans members whereby one specific clan can built their houses after consultation with the clan even without buying the land. But they cannot sell the land as long as it belongs to the clan. But in the present days lands are mostly bought by individual and they become the sole owner over the land.

For example, the Longchar clan in Waromung village has their land in Mongsen Tenem or Mongsen Hill and the Longchar clan can reside in those areas free of cost, starts business of their own and it can be passed down to their children and no other clan or clan members can evict them. They have the right to cultivate in the field and if other clan wants to cultivate in the field they will pay in kinds such as crops that they harvested. Such is the system handed down from generations and this has been going on till the present times. This system are found in all the villages in the district as most of the villages are created out by the people searching for new pastures from

the mother village which is the Chungliyimti village. Another type of ownership is village community land whereby the lands are under the village council and they decide on where the villagers can harvest the land and which land should be kept as reserved. The villagers have to follow the decision set by the village council and no villagers have to go against the words. But nowadays most of the villagers are buying the land from their clan but this cannot be sold to other people outside from their village. This is one of the main reasons why villagers can maintain their unique identity from other forces.

The urban settlement created out from 4 villages i.e., Ungma, Mokokchung village, Chuchuyimpang and Khensa in the Ongpangkong range has greatly helped in the development of their villages because they have the landownership right over govt. offices, roads, drainages, water supply, forest, business establishment to name a few.

3.3.2 Building materials

In the last few decades till the 90's the structure of the houses were made of local materials such as-bamboos, woods, thatch, reeds which were available in the local market. Then migration of people into the town starts the booming business in building activity which leads to the development and initiated the settlement of the town. But in the rural area there are still patches of houses made of local materials but nowadays most of the houses are constructed by the G.I. Sheet sold at a lower price or even given free by the government to the people living below poverty line. Most of the structures

build by local materials has the life expectancy of little over 5 years and with major repairing it may stand for 10 years. But at present the materials used for construction of houses both in rural and urban areas are done by rods, bricks, cement, timber, G.I. Sheet etc., which has a longer durability and this indicates the development of the region.

Roads and communication has brought this region into the mainstay with the rest of the country. The needs for better livelihood have made the people realized the importance of good economic structure where the old system of barter economy within and outside the villages was not profitable for them. Better economic incentive has helped the people to developed their areas and also with equal terms with other people. Even though the region's topography is rugged and difficult for bringing development, the people in the region has adapted with the environment without much difficulties. Nature too plays an important role in shaping the lives of the people in the region and most of their tradition; socio-culture is based on the environment they live in.

3.4 economic and social infrastructures

The dynamics of Population change and developmental planning is closely interlinked which can help in understanding the inner issues of socio-economic development of a region. Mokokchung district is not far behind in these changes with the fast growth of population. This has brought overall shift in population dynamics in the socio-economic development of the district. Since the district does not have any industrial development for proper

economic amenities, the main source of income for the people is from the agricultural sector. The socio-economic structure in tribal communities is markedly different from that of the non-tribals or advanced group of people (Mohanty, 1999).

3.4.1 Economic Structure

Mokokchung district is rich in resources which are basically from forest as the forest cover of the district is 88.24% (2003 Report), but most of the virgin forest has become a vast grassland and also manmade plantation has affected the fragile ecosystem. Land and water resources are the most important properties of the Nagas. Since the time of the forefathers the Naga people have held the land and water resources closely to their hearts and their culture and traditions are directly related to the land they inhabit. The table shows that the people engaged in cultivation decreases as the years goes by however, it does not show any advancement in other field for development.

The characteristics of the tribal economy may broadly be viewed in three ways, viz (i) the structure of the tribal economy, (ii) the tribal economy as a socio-economic and cultural system, and (iii) economic characteristics of the tribal economy. The structure of the tribal economy is generally based on forest and sea and forest for coastal and island tribals. The simple technology and absence of technological aids, is the other structural feature of the tribal economy. At the socioeconomic and cultural level the family is a unit of both production and consumption. The community itself acts like a co-operative

unit and the tribal community living in a village or locality is economically interdependent. The distribution is generally based on gift and ceremonial exchange (Mohanty, 1999). The employment in trade and commerce is poor as only 2.12% of district working force is engaged in it. Likewise transportation and communication activities employ a meager of 0.88% for the district. The bulk of the employment is provided by cultivation which accounts for 63.93% of the total employment of the district. The percentage of employment in each of the non-agricultural activity is higher for the district. With increased urbanization and industrialization of the district which is likely to be more concentrated in the district is likely to increase in due course of time. The 3.98% of land-less agricultural labour in the district indicates a measurable tendency of the landless people to concentrate in the more urbanized part of the district.

The table 4.5 indicates that the majority of the working population has engaged in agriculture with the majority of cultivators concentrated in the rural sector with 49.85% in 1961 but declined to 38.55% in 1971 which is a 11.3% decreased in one decade in the district and 0.24% in 1961 in the urban sector which has increased to 1.74% in 1971. In the state the number of cultivators in the rural sectors was 55.07% in 1961 which has declined to 43.52% in 1971 and in the urban sector it was 3.79% in 1961 which has declined to 1.84% in 1971. The main reason for the high increase in the cultivator in the district is mainly because during the 1961 to 1971 Wokha and Zunheboto were under Mokokchung district and later the full fledged

district hood was created. The labourers engaged in the agricultural sector was 1.64% in both rural and urban sectors in the district in 1961 and 0.09% in 1971 as against 0.67% in 1961 and 0.74% in 1971 in the state which indicates that the practice of hiring labourers is only a recent trend and most of the cultivators in the state depends on the family members for their work with a believe that big family members is the only way to help in the field. This was the main reason why big family was appreciated by the people so that the children can work in the field as unpaid labourers.

Table.4.5: Distribution of working population by agricultural and other workers

| State/District | Total Rural Urban | % of Agricultural and other workers to total population | | | | | | | |
|----------------|-------------------------|---|-------|----------------------------|------|------------------|-------|-------------|-------|
| | | Cultivators | | Agricultural/ Labourers | | Other workers | | Non-workers | |
| | | 1961 | 1971 | 1961 | 1971 | 1961 | 1971 | 1961 | 1971 |
| | | | | | | | | | |
| Nagaland | T | 32.41 | 39.37 | 0.67 | 0.74 | 6.32 | 10.64 | 40.60 | 49.25 |
| | R | 55.07 | 43.52 | 0.71 | 0.76 | 4.92 | 6.51 | 39.30 | 49.21 |
| | U | 3.79 | 1.84 | 0.07 | 0.46 | 31.89 | 48.08 | 64.25 | 49.62 |
| *Mokokchung | T | 47.42 | 34.74 | 1.64 | 0.09 | 7.12 | 10.80 | 43.83 | 53.37 |
| | R | 49.85 | 38.55 | 1.73 | 1.14 | 6.27 | 6.18 | 42.15 | 54.13 |
| | U | 0.24 | 1.74 | | 0.79 | 23.60 | 50.75 | 76.16 | 46.72 |

Source: Population Census, 1971

***The population of Mokokchung district comprises of Wokha and Zunheboto thus showing the high percentage of workers.**

Those people who were not engaged in agriculture in the district was 7.12% in 1961 and 10.80% in 1971 as against 6.32% in 1961 and 10.64% in 1971 in

the state which shows that Mokokchung district has the highest other workers as compared to the state during this decade by 0.8% in 1961 and 0.16% in 1971. But the unemployment ratio is higher in the district as compared to the state by 3.23% in 1961 and 4.12% in 1971. This indicates that the dependence on agriculture was at premium and also one of the main problems in the state as well as the state is that those who are in the govt. job are considered as employed which created lot of disparities between the salaried and the non-salaried job.

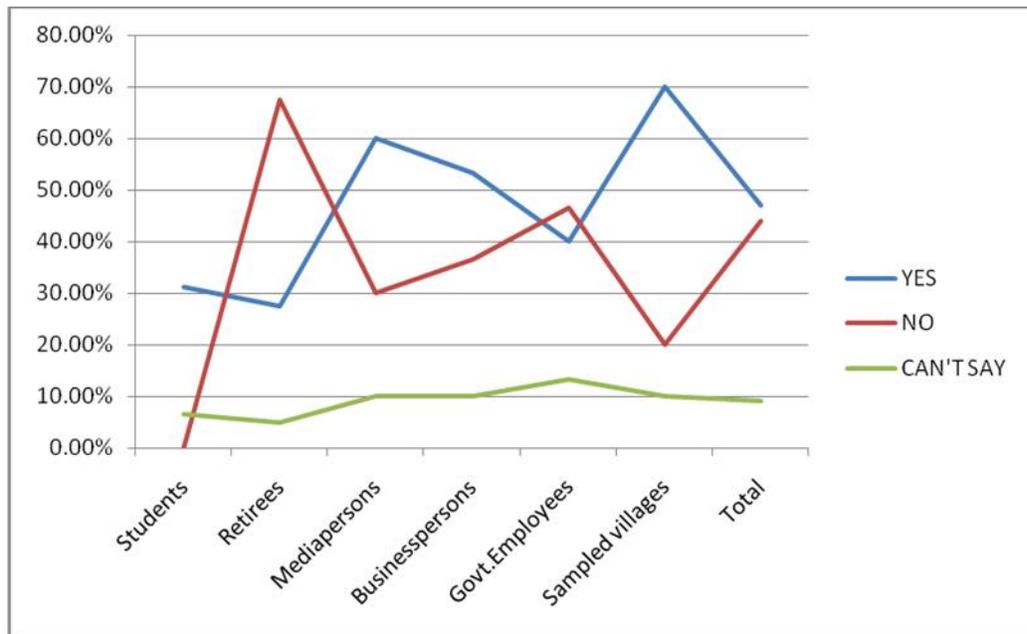
A field survey was conducted on the denizens of Mokokchung district from 2008-2011 where the questionnaires were given to the students, retired persons especially the senior citizens, media persons, businesspersons,, government employees and some villagers from the sample villages on the question,-- 'Is agricultural and cottage industries the means of livelihood of the people of the district? Yes, no, can't say.

Table 4.6: percentage from the respondents

| Respondents | Yes | No | Can't Say |
|------------------|--------|-------|-----------|
| Students | 31.11% | 62.2% | 6.6% |
| Retirees | 27.5% | 67.5% | 5% |
| Media persons | 60% | 30% | 10% |
| Businesspersons | 53.3% | 36.6% | 10% |
| Govt. Employees | 40% | 46.6% | 13.3% |
| sampled villages | 70% | 20% | 10% |
| Total | 47% | 44% | 9.14% |

Source: Field Survey, 2008-2011

Fig.4.3: Line Charts indicating the respondents answers



Most of the answers given by the respondents vary according to the type of professions and their age group and the most answered was 'Yes' with 47% and closely followed by 'NO' with 44% and 9.14 % who said 'Can't say'. The table 4.6 shows that the highest number of 'YES' responded from the members of sample villages and the lowest from the students and retirees with 31.1% and 27.5% respectively. The reason for this is that the villagers are mostly engaged in their field for their daily income and their whole life profession is agriculture and they felt that cottage industry can help them to improve the crops by the process of canning and not by selling them raw. Whereas students and retirees though their answers are different from each other feels that dependence on agriculture alone could not suffice, rather one must have skilled knowledge on what they do. To have better economic setup industries must be set up so as to extract the raw natural resources thereby

giving job opportunities to the youth. They all opined are industries so that the district can be the producers and not only consumers. Fig.4.3 shows the different lines indicating their views on the questions of the sample villages who felt that agriculture is the most important types of economy for the district.

Most of the students who said “No” are that to have better livelihood they need to have some security by having better jobs and some said settling in other districts and going out to other cities in search of jobs instead of clustering in the district. The answer differs but through this interaction, we could understand that agriculture though it is an old economy is still a part of the district. The people depend on it and most of the villagers who could not get any skilled job can get their daily income from the crops they sell. Also being an agricultural district, Mokokchung has high potential for settling up cottage industries and they are skilled in those fields. What is needed is financial aids for the industries and for the workers. Those who said “Can’t Say’ mostly are double minded who gave the answer that agriculture is important but too much emphasis on it has destroyed in the development of other economies. Their views were that emphasis must be given on skilled labour force and also on how tertiary sectors can be uplifted because the district is rich in natural resources. Focuses must be given on how to improve the living standard of the people according to the changed time and not fall on the age old traditional economy which has affected the district. But they again said that agriculture has made the people self-sustained and not

subservient to others. It is revealed that whatever the views hold by the young generations about primary economy the main income for most of the people of the district is from agriculture.

As most of the people of the district are engaged in agriculture the percentage of total workers to the total population in the district is 32.37% as against the 29.94% for the state in 2001. The percentage of Male workers to male population varies as 33.85% for the district and 31.89% for the state as shown in the table 4.7. Likewise the percentage of female workers to female population varies as 30.68% for the district and 27.66% for the state. The overall percentage of workers in the district is 11.34% as against 88.65% in the state in 2001.

Table.4.7: Distribution of workers by sex, 2001

| Area | Percentage of workers by sex, 2001 | | | | | |
|------------|------------------------------------|-----------------|---------|---------|--------|---------|
| | Total workers | % Total workers | Male | female | % Male | %Female |
| Nagaland | 849,982 | 88.65 | 487,767 | 362,215 | 36.46 | 29.88 |
| Mokokchung | 108,779 | 11.34 | 60,612 | 48,167 | 35.78 | 30.69 |

Source: Population Census, 2001

The total work force in the district was 37,479 in 1971, of which 9283 were engaged in the urban area. Of the 28,196 rural employments, which was almost a full employment, the income is not very gainful. Growth was concentrated mainly in the urban area of the district. Also, informations are lacking for earlier periods. Employment in the rural settlements and future

urban areas should be more in the nature of the targets rather than estimates on the basis of the past trends.

With the advent of modernity and the emergence of urban and semi-urban areas, the land and the water resources have undergone a drastic change due to improper utilization, over-exploitation and pollution. Most of the land, its products and water resources are being depleted at an alarming rate, with people remaining more or less ignorant about the long term consequences.

There are many areas from which instances of over-exploitation and pollution can be cited, it is to be noted that land and water resources have been depleted and rendered useless as population pressure leads to economic pressure (Kayastha, 1998).

The immediate cause of this forest depletion is because of the fact that the people of Mokokchung have the habit of burning a huge quantity of firewood during the whole year either for cooking or for warmth. The burning of firewood is more during the cold winter days and nights. The demands for firewood were met by the neighbouring villages; they cut down the trees, stacked them and sold the woods on the basis of truckloads. It is a common assumption that in an average, a family a truckload of firewood is burned annually. The residents of the town who are mostly migrants from other far-flung areas working as government employees, found it easier and more economical to buy the fire-wood in terms of truck load rather than to bring it from the remote villages. The neighbouring villagers also consider it as an

easy way of income since they get an ideal market to sell their forest products.

But this has gone for only a few years, now the neighboring villages do not have enough forest to sell firewood to the residents of the town. All the trees which were estimated to be hundreds of years have now been cut down, and now only small trees estimated to be ten to thirty years are growing in the forests. Even the lands have become more or less like grasslands which cannot yield agricultural crops products unlike few decades ago.

Nowadays, almost all the residents buy the firewood from other villages like Longkhum, Mangmetong which is farther away from the town for they have still some thick forests. Even the small streams flowing across the town have become polluted with waste products like polythene bags, tins, rags. Even small fishes and prawns which were found in plenty at the streams have now vanished. This is the present condition of the rivers and streams in Mokokchung town. However, this effect has been brought about after long years of pollution.

The inadequacy of market centres in the region has hampered in the overall development as the increasing agricultural and industrial productions will not only generate a significant increase in the movement of the raw materials and the inputs, the surplus production must necessarily be marketed and distributed. Plate 4.2 shows the women selling their agricultural crops in the local market in the district. Such markets are their only mean of sustaining

their family and it is the women only who sell the products rather than the men-folk.



Plate 4.2: Women vendors selling fresh vegetables in the market

3.4.2 Social structure

Society is dynamic never static. Human groups change slowly or rapidly under the pressure of internal and/ or external forces. All the culture traits of a social group do not, however, change simultaneously (T.C.Das, pg.97-98, 2005, Tribal Communities and Social change). Mokokchung district is inhabited by the Aos which is divided into two main divisions, Mongsen and chungli and few tribes such as Sumi, Angami, Nepalis, and from others part of the country. It is revealed that the district is a patriarchal society. However, women do take active parts in the society. The villages of the district have the same social system where men folk are the law keepers of the village.

Education has helped in shaping the social structure of the district and the data shows the high increase in female literacy and also employment of the female counterpart. The gap between men and women in literacy rate is 4.42% only in 2011 with female literacy rate of 91.74% against the male literacy rate of 93.55%.

There is a slight increase in the sex ratio in the district although the decadal growth rate is -16.77%. Women participations in all activities are visible in all the 6 ranges of the district. The distribution of workers in the tribal family is based on, a well organized division of labour according to sex and age (Mohanty, 1999, 192).

The district has no slums-dwellers, poverty is less and everyone has their own self sustenance when compared to the other states. The community looks after each other in times of trouble be it social and economical. It is one of the

rich culture that the Ao-Nagas have inherited from the forefathers. As in Moayimti village while conducting fieldwork the researcher could see the village chairman looks after the health of an old woman who is above 95 years old giving her food and making sure that she is comfortable. Also another family who has five children all under 14 years old the youngest being merely 4 years and the father a stroke patient. Looking at that family burden one can see that he does not behave like an invalid but involve in work like making bamboo baskets and thatches for his livelihood, the village people buy it from him. These kinds of experiences have been witnessed in all the villages during the field study.

3.5.1 Agricultural, household-firms and poverty

Agriculture remains the main occupation of the people of the district. The traditional jhumming cultivation with tree-ash manures and traditional seeds produces low output per unit of land. Female employment in the agricultural sector is high with 40 percent of women workforce employed. Different types of agriculture are practiced in the district, such as horticulture, paddy, sericulture, orchards, tree plantation, piggery, poultry, fishery, vegetables and livestock rearing. Focus is given more on agriculture by the government that all the land are utilized for one sort of agriculture and this has lead to the agricultural growth of 10% during 2006-2007 in Nagaland which is much higher than the National average of 2 percent. The food grain production was 405.5 lakh metric tones during 2004 - 2005 which has increased to

479.720lakh metric tones in 2007-2008. The State Human Development Report, 2004 identified the need to address infrastructure development and agriculture technology towards strengthening the agriculture sector for generation of livelihood and employment opportunities. This implies the focus given to the livelihood and employment opportunities in agricultural and horticultural based food processing industry.

Shifting cultivation is practiced in all the villages of the district with more than 92.5% of the cultivated land in Mokokchung district used for the production of cereals and 'In pure shifting cultivation, labour is the only asset of the family; land has no value as capital.' (T.C.Das,) which is true in the district as labour force is very important thereby leading to high concentration of population in the rural area. The people employed in the field are the family members who toil in the field and the income generated from the field is less compared with the work put into the field. In the case of terrace cultivation in Melak plains and Changki valley most of the labourers engaged in the field are from the neighbouring states of Assam where the labour is cheap and also the fields are near to Assam. This has lead to high number of migrant labourers in the district. Only a very small portion of land 6700 acres (6.70%) of the cropped land is under the vegetables and fruits cultivation and it is mostly concentrated in the Changki valley and Melak flood plains. The percentage measurement of agricultural production is hard to check accurately, because the farmers use the figure assessment in terms of tins which is equivalent to 10 to 12 kgs. They used the old traditional system of

weight which varies from village to village. But it is only taken as 'metet' (in Ao dialect) or tins value the quantity of rice and other agricultural products verbally informed by the villagers. Most of the farmers used traditional method of farming and using traditional seeds but some villages are given aids by the department of agriculture such as seeds, fertilizers, water pump to use during the operation in the field. Normally, the villagers used the matured seeds that were produced in the previous season which is healthier as it does not contain any chemicals. This has led to low production of crops as compared with those using the high yielding varieties of seeds and chemical fertilizers. Table 4.8 shows the number of villages under different blocks that practiced different types of agriculture. The most prominent type of agriculture was T.R.C field which accounts for 86 fields as table 4.8 shows with the highest in Mangkolemba with 37 fields the lowest in Ongpangkong blocks with 17 fields according to 1977 records. In all the blocks TRC was the main agricultural practiced and only 19 HYV paddy practiced in the district. But this has changed in the present scenario as jhum cultivation has taken over the T.R.C (Table.4.9) which has affected in the receding of forest covers in the district.

Table.4.8: No. of villages having different types of agriculture in 1977

| District/Blocks | T.R.C. fields | H.Y.V. Paddy | Minor irrigation | Double Cropping |
|-----------------|---------------|--------------|------------------|-----------------|
| Changtongya | 32 | 9 | 13 | 2 |
| Mangkolemba | 37 | 6 | 32 | 9 |
| Ongpangkong | 17 | 4 | 13 | --- |
| Total | 86 | 19 | 58 | 11 |

Source: Statistical Handbook of Nagaland, 1981

Most of the agricultural land is harvested for two years after which it is left for 7-12 years as fallow land. It is due to shortage of agricultural land by ever increasing population in the rural areas. The fallow land is reduced to 4-7 years and the practiced of multi-cropping and plantation of trees has lead the villagers to search for virgin forest for cultivation.

Table: 4.9. Area & Production of Principal crops for the year 2006-07 in Mokokchung district

| District/Blocks | Area | Production |
|-----------------|-------|------------|
| Jhum Paddy | 14090 | 21940 |
| TRC/WRC Paddy | 2820 | 4510 |
| Maize | 6380 | 10600 |
| Total | 23290 | 37050 |

Source: Statistical Handbook of Nagaland, 2009

Table 4.9 shows concentration of in the jhum cultivation where the land use was 14090 hac. and the production is 21940 in 2006-07.

Fig.4.4. Pie Diagram of Agricultural production in Mokokchung district in 2006-07

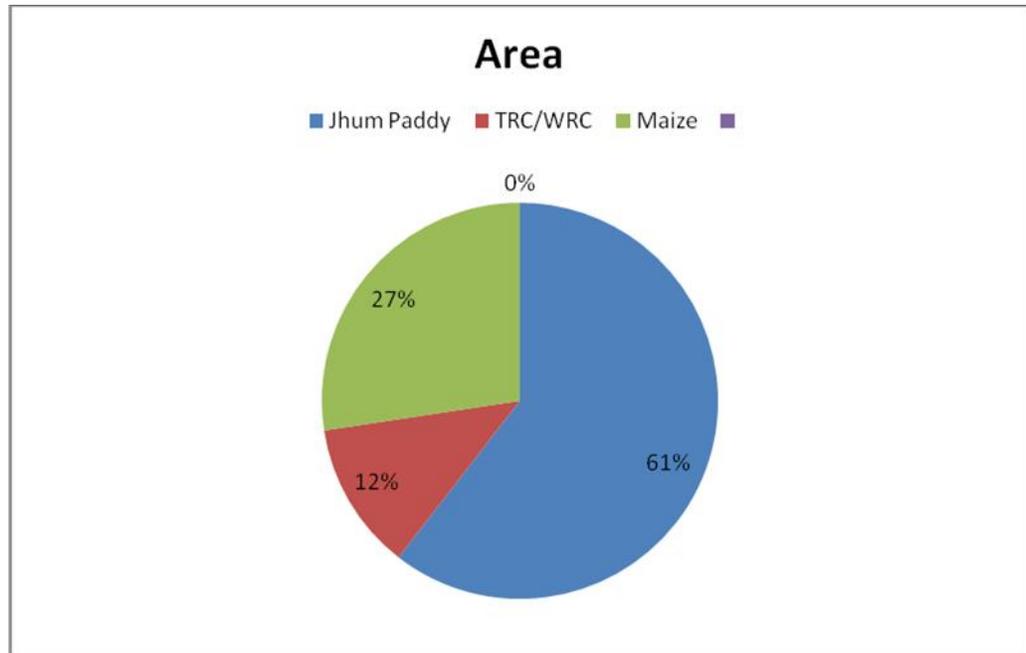


Fig.4.4 shows the percentage of land under different agricultural production and out of the agricultural area of 23290 hac. 61% is in jhum cultivation, maize occupies 27% and 12% in TRC/WRC paddy of the agricultural production.

Agriculture which is the main economy of the district has its shortfall to numerous factors. Some of these are given below:

- a) By and large, farmers use fertilizer applied to sloping land and used of traditional seeds. Introduction of high yielding variety seeds is yet to make any impact in the district except in the Changki valley and Melak plain.
- b) Lack of adequate knowledge of the soil forbids efficient use of fertilizer: the torrential rain washes away the fertilizer applied to sloping land; and the

rugged terrain makes it difficult to carry the fertilizer to the field. The jhumming cultivation preserves the top soil by the roots of the trees whose ash is used as fertilizers, but this traditional fertilizer is not quite suitable for the high-yielding variety of seeds.

c) The effective area of cultivation by jhumming system is drastically reduced as the land must allow for growth of the trees until they are good for producing manure in requisite quantities. The cycle of cultivation is repeated on an average every fourth to fifth year which affects the soil fertility.

d) To go for Terrace cultivation is almost totally difficult for the people. Also for scarcity of perennial water source and difficult terrain the agricultural implements for terracing are not available in the district.

e) The market mechanism is yet to develop to provide incentive for higher level of production. Surplus food-grains are not saved adequately for use in future. In the villages having better communication linkage with the few markets in the Circle Headquarter, the collection and sale of the surplus food-crop is usually on community basis.

f). Most of the villagers are unaware of the advantages of the co operative societies and the agricultural credit as there is no other bank-commercial or public-in the rural areas except in Tuli, Mangkolemba and Chuchuyimlang which is seldom taken by farmers from remote areas.

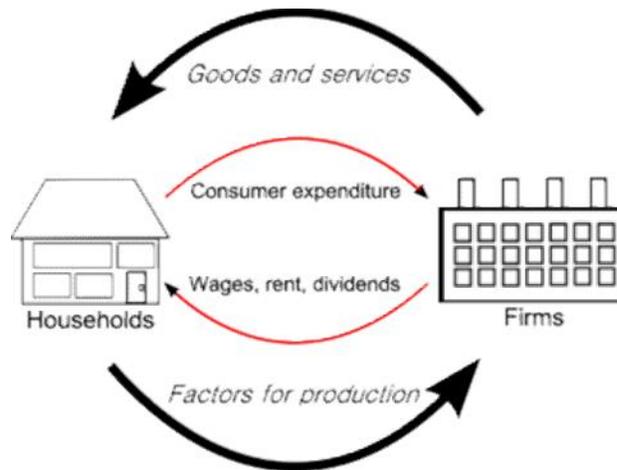
g) Inaccessibility and virtual absence of any mode of travel to and from the villages except on foot has made the economy closed and not an open one,

resulting in almost complete absence of a marketing system household-firms thereby creating poverty.

3.5.1 Household-firms

In economic terms, the main producer is the firm and the main consumer is the household whereby producers are in charge of the creation of goods and services, consumers destroy the goods and services produced to satisfy their needs. This determines the economic development of a region according to its resources availability. The fig. 4.14 shows the circular flow of income or circular flow that is reciprocal circulation of income between producers and consumers (Mankiw, 2006). In the circular flow model, the inter-dependent entities of producer and consumer are referred to as "firms" and "households" respectively and provide each other with factors in order to facilitate the flow of income (Sloman, 1999) as shown in Fig. 4.5. Mokokchung district with overwhelming majority of agricultural area the consumer is higher than the producer mainly because of the lack of industrial infrastructure and lack of market facilities. With ever growing population, the demands for goods are increasing rapidly whereby the firms are unable to meet them.

Fig: 4.5. Circular flow of income



Source: [Wikipedia.org/wiki/circular_flow_of_income](https://en.wikipedia.org/wiki/circular_flow_of_income)

Thus the Dependence from other region especially from Assam has made the district a subservient to other economic forces. Population growth has also made the district to rely heavily on goods from other region though the district is in one of the most commercially centered area. 'Industrial development in general and growth of small scale sector in particular has been tardy because of weak tradition of enterprise and inadequate entrepreneurial and management inputs.' (Chakravarty, 1998; 150). The problems of topography also put constraints on the development in the firms as the use of heavy machineries are difficult which hampers and slide back from other economies and the 'rigid compartmentalization of growth mechanism in North-Eastern States, where one state hardly has any worthwhile trade, production and economic linkages with the neighbouring state' (Mahajan, 1998; 108). The canning factory in Longnak which was aimed in giving employment opportunity to the villagers and for the farmers

to sell their agricultural products has fallen into ruin due to the neglect of the people and the apathy of the government. The reeds and bamboos are predominant around the Tuli belt which leads to the opening of The Tuli Paper Mill in Tuli Town (Plate 4.3) which was opened with much fanfare but has also fallen into despair leading to lots of unemployment to the local populace. It has also led to the destruction of the ecosystem of the area because of the destruction of the forest in order to meet the demands of the mill. The problem in these cases is that of the ignorance of the people 'due to lack of proper knowledge, guidance, training and encouragement' (Chakravarty, 1998) on the importance of the factories for their own benefits and also the lack of interest given by the government. These two are the only factories found in the district which could give employment opportunities to the people and also help in exporting seasoned and preserved agricultural products. 'Total failure of the co-operatives in tribal areas is unfortunate' (Chakravarty, 1998; 154).

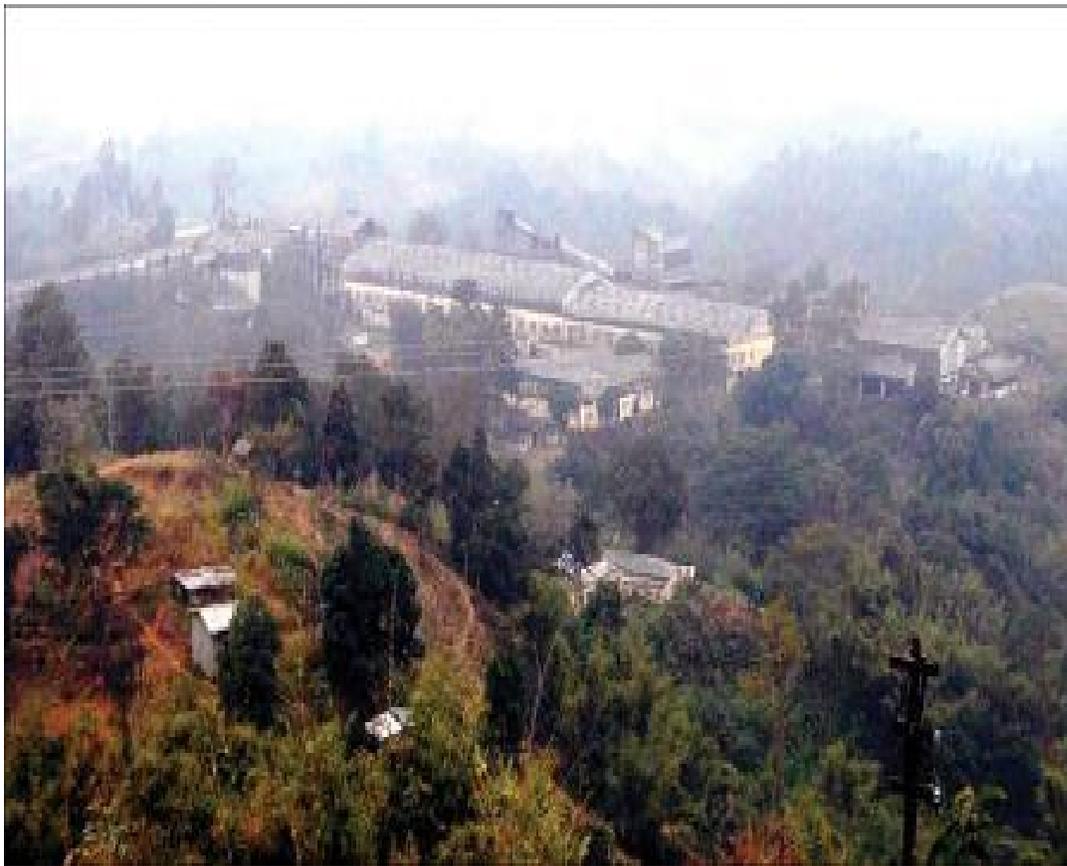


Plate 4.3: Tuli Paper Mill in Mokokchung District

The demand for goods and to improve the economy of the household, different schemes and plans were been carried out in the district and one important scheme is the Co-operative societies (COS). This society helps the rural people to have their own source of income and also for their own consumption. Different schemes are been carried out by the COS under three processes: Share Capital Contribution (SCC), Working Capital (WC) and Subsidy.

The Co-operative societies (COS) in Mokokchung district has help in the economic enterprises of the villages by three process: Altogether there are 620 COS (2012) which is an increase from 42 COS (1972) in the district mostly in the rural sector. The SCC is the main function whereby the department gives Rs.20, 000/. The activities of the villagers are mostly farming, fishery, piggery, poultry, fruits and vegetables. Most of the people engaged in these activities are individual share holding making it their household-firms and property. They start their business in the village free from any community sharing and these help in the economic development of the village as a whole. The traditional social institution provides an excellent background for progress of co-operative movement. But it has been found out that most of the activities in COS have it shortfalls due to these factors:

- a) The lack of monetary fund and also the lack of incentives to meet the high cost price in commodities.
- b) The unplanned and unorganized activities which leads to the unsuccessful endeavor in business such as piggery, fishery and farming.

c) Absence of market to sell the goods outside the district is also one of the main problems.

d) The lack of proper utilization of resources has stagnant the activities and also to get the subsidy for own personal needs has affected the development of the economy.

e) The difficulties of the geographical and cultural factors of the district have also hampered in the growth of COS and progress in forming an intercommunity co-operative.

3.5.2 Poverty

Poverty can be defined most simply as a lack of one or more of those things that determine quality of life (Beall & Fox, 2009) and it is rightly applicable in India where The Human Development Report ranked India at around 130th rank among 177 countries and The International Food Policy Research Institute's Global Hunger Index ranks India 94th among 118 countries surveyed. The World Food Program (WFP) estimates half of the children in India suffer from severe or moderate malnourishment as per the Household Consumer Expenditure Survey for 2009-10, 29.9 per cent of the population alone was under the BPL from 37.2 per cent in 2004-05. (Planning Commission, 2010-11).Poverty in India is nearly 38% of India's population (380 million) based on two inter-related aspects of poverty - Urban and rural poverty. Dreze & Sen has described poverty as 'capability deprivation' where there are social constraints as well as personal circumstances-to choose other

types of living. This 'capability deprivation' is felt mostly in the minority societies where the upper richer class dominates their rules and control over the lives of the lower class people as shown by the data where the highest poverty level in the rural areas are the, Scheduled Tribes (47.4 per cent), followed by Scheduled Castes (42.3 per cent), Other Backward Castes (31.9 per cent) as against 33.8 per cent for all classes. (Planning Commission, 2010-11).

Economic disparities affect the character of social life, the nature of the political process, and the priorities of the state (Dreze & Sen, 1995). 'Underdevelopment and inequality are the two prime factors of poverty' (Panda, 2000; 220). In the tribal belt area most of the rural people has their own land and their own property rights, but due to the increase in population the availability of land per capita is bound to fall which leads to the 'fragmentation of landholding'. (Sengupta, 2004), thus affecting the family income economy by the reduction in agricultural production. The loss of land due to fragmentation, loss of agricultural income per family and 'dispossession of land to cash need of families to meet basic necessities' (Sengupta, 2004), has led to Poverty which is 'probably the largest single factor behind current and future migration flows' (Oberg, 1995; 372). Nagaland, which is inhabited by the Schedule tribe, has also been put in the rate of high poverty level.

The Planning Commission of India (PCI) revealed that poverty level in Nagaland is 40 percent in the rural areas and 20 percent in the urban areas

(Dept. of Planning and Coordination, Kohiman, 2009)) which is among the other states in the country between 2004-05 and 2009-10. The poverty estimates have been calculated on methodology suggested by the Tendulkar Committee with estimates from NSS 66th round of consumer expenditure based on 2009-10 prices. The national average for the Tendulkar poverty line has been worked out to Rs. 672.8 per month per person for rural India and Rs. 859.6 per month per person for urban areas, , but the per capita consumption expenditure of Rs. 1016.8 and Rs. 1147.6 in rural and urban areas puts one above Nagaland the poverty level.

The people living below poverty level in Mokokchung district is 4.92% in 2009-10 which is lower than the 12.1% of the state as shown in table 4.10.

Table 4.10: Number of people living Below Poverty Line (BPL) 2009-10

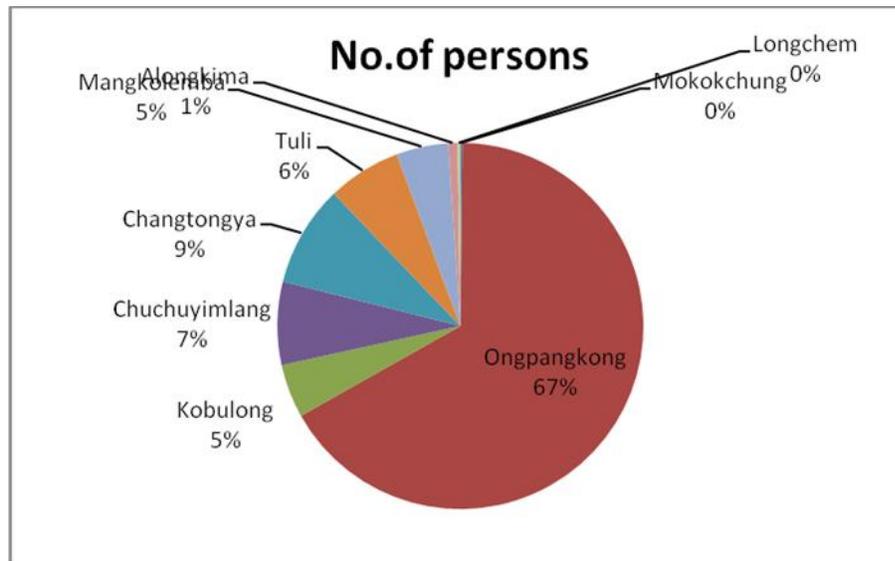
| District/Circles | No. of persons |
|------------------|----------------|
| Mokokchung | 18 |
| Ongpangkong | 6674 |
| Kobulong | 473 |
| Chuchuyimlang | 736 |
| Changtongya | 896 |
| Tuli | 650 |
| Mangkolemba | 460 |
| Alongkima | 82 |
| Longchem | 24 |
| Total | 10004 |

Source: Department of Food & Civil Supply Office, Mokokchung, 2009

The highest BPL is in Ongpangkong Circle with 6674 persons who make up 67% (Fig. 4.6) of the total BPL and the lowest is Mokokchung town and Longchem Circle which does not even make up a percentage in the overall total BPL. When an 'economy can successfully absorb the growing labour force in effective employment, it can mitigate the problem of poverty and accompanying environmental degradation.'(Sengupta, 2004) which is true in the case of Mokokchung district. The problem of environmental degradation is high in Ongpangkong range as the demand for land for cultivation increased due to increased in population. Soil degradation is high due to depleting forest because 'The poor would operate outside the market system and consume natural resources directly for survival by either overharvesting it or depleting useful chemicals contents '(Sengupta 2004) which is found in places in Anaki 'C', Changki Valley, Mongchen village where the exploitation of coals has affected the environment thereby creating lots of environmental hazards and also polluting the waters.

The figures of the BPL in Mokokchung shows that the urban poor is less than the rural poor as most of the BPL are in the circles which are constituted by different villages. One of the main reasons for the high number of BPL card holders is that the government gives aids such as ration cards for buying of rice, sugar etc at the lowest price of Rs. 8 per kg of commodities. This card is given only to those who does not own any land, practice any farming and are not employed in any jobs, private or government.

Fig: 4.6: Pie diagram showing the number of people living below poverty line in %



Source: Dept. of Food & Civil Supply Office, Mokokchung, 2009

The number of BPL is increasing steadily because of the growth of population and the agricultural land is uncultivable to produce crops due to loss of the fertility of the soil. The number of unemployed people is increasing in the rural areas where agriculture which was their mainstay has now diminished due to land fragmentation and to long fallow period.

4.6 Field study of selected villages

Altogether twelve (12) sample villages were selected for the study from the six ranges of the district. The detailed study of these villages is given below:

4.6.1 Chami Village

The village lies at the Longitude of 26° 25' and 94° 30' Latitude and 1250 ft above the sea level. The area of the village is 13.07 Sq.km 17 kms away from

the District Headquarter. The district falls under Kubulong and lies in Asetkong range between two giant villages, Mopungchuket and Sungratsu villages. Though the area is big compared to some of the villages the population is also very less with just 163 persons in 2011 which is an increase from 77 in 1981. The village is overshadowed as it is cumbersome between two mega giant villages. Being a small village, it is having good market facilities whereby they can sell their surplus agricultural goods to the nearby villages. Their culture and society is also alike with all the other villages where menfolk are the decision makers in the society and women-folk does not have much roles in the society except in church, Self-Help-Group and Anganwadi.

4.6.2 Lakhuni Village

Lakhuni village with an area of 8 Sq.Km is situated in the Japukong range in the western part of the district at an altitude of 600 feet above sea level and lies at longitude 94° 35 and latitude at 26° 25 . The village is famous for betal leaves and betalnuts or areca nut (Areca Catechu) which is the seeds of the areca palm and is their main source of income. The population of the village is steadily increasing as shown in table 6.4 with but there was a drastic increased in population in 2001 with 1071 persons. However, it has been decreased to 503 persons in 2011. The village is located near the border with Assam which makes it easier for the villagers to sell their products at reasonable prices. The village betal leaves and betal nuts are very popular in

Assam and also in the district headquarter. Being near the border the villagers hire laborers from Assam to work in their field.

4.6.3 Merangkong Village

Merangkong village lies in the Langpangkong range is one of the largest villages in the district with a total population of 2557 persons (2011 census). The village lies at the of Lat 94° 40' long 30° 40' and 800 ft above sea level. The population of the village was 1945 with the household of 380 in 1981. The village falls under the Tuli Circle and is one of the most developed villages. The village is further subdivided into Merangkong Compound. Female population was higher in the village with 976 females against 969 males in 1981 census. The village is inhabited by the scheduled tribe mostly Ao- Naga as the overall schedule tribe population in the village was 1934 persons in 1981. The population increased every decade with the highest increased of 4063 persons in 2001 census and the population decreased to 2557 persons in 2011.

4.6.4 Mongchen Village

Mongchen village is situated in Changkikong range of Mokokchung District with an area of 14 Sq.km and lies at 26° 25' longitude 94° 30' at an altitude of 1200 ft above sea level, is located 52 Kms away from Mokokchung town. The population of the village is 485 according to 2011 census with 132

households. The people of the village are all tribal with only one non-tribal who is a govt teacher in the school.

The village is connected by road via Changki Gate, but due to the roads condition has become very pitiable not fit to travel in small vehicles. The black topping is almost eroded due to incessant rainfall during summer and the complete neglect of the range has rendered the roads to return to its original place. The village is situated on a hill top, 1200 ft above sea level. Tata Sumo is the only vehicle fit to travel in this road, as the roads are small and full of twist and zig-zak turn.

Family is the main fabric of the village. The sense of belongingness with one another and family ethos makes this village one of the most civilized and strong social structure in the district. Menfolk are the head of the village, but one interesting fact is that, fathers are closer with their children than mother. Mothers are the head in the kitchen, but whatever decisions are to be made, father and the children talk between themselves, rather than the mother. The church is the main foundation of the village society, and there are two types of denomination, Baptist church and Revival church, they co-exist peacefully. The village has its chairman, appointed for 3 years, from a clan, but the main functionaries are performed by the whole population also called as Senso Mungdang/organization. Women do not take part in any of the village activities, except in some organization such as V.D.B, Anganwadi, Self-Help Group and church related activities. The village was formed around 600 years back with 8 people comprises of different clans of neighboring villages; they

are, Mollier Clan from Waromung village, Imchen clan from Dubai village and Pongen clan from Japhu. These 3 clans have initiated the entire establishment of the village and are still expanding with every population growth. Later on, Jamir clan also came into the village and till now the village has only those 4 clans. This village is also one of the smallest villages in the district, but it is one of the most developed in terms of literacy rate. Almost all the children are literate, and the people give importance to education. Issues of illegal immigrants are not a problem as the village is not affected by it.

4.6.5 Ungma Village

Ungma village with an area of 50 sq.kms, is the biggest village, 5 kms away from Mokokchung district HQ, lies within 94° 30' longitudes and 26° 15' latitudes in the South eastern district at an altitude of 1200 ft above sea level with a total population of 7409 persons (2011 Census). The village is divided into Yimpang and Yimlang sectors and according to the village council report of the two sectors, the yield of rice in the year 2008 was 3712(from tin). However, the economy of the village is not from agriculture alone, other sectors are, stone crushing, forestry and private own orchards. It is revealed that unlike many villages Ungma village does not require non Naga workers, and the village council do not entertain the idea of migrant labours in the village. The entire business establishments regarding the development of the village are in the hand of the Village development Boards (VDBs) and they

are the real power behind the village development. Nevertheless there is problem of segregation in the village, reason being the competition between, Yimpang and Yimlang sectors. But as a whole they are a united front and are one of the decision makers in the development of the district. Women plays active role in the church, social activities such as Self Help Group, Anganwadi but they are not given the independence to act on their own, rather they follows what men has to say. Socio-economically the village is rich in resources, and socially strong, and this village is considered as a mini-town of Mokokchung district.

The population of the village is male-dominated and the village is dominated by middle age people as most of the young people settles in the metro districts.

4.6.6 Yaongyimti (Old) Village

The village lies at 94° 45' longitudes and 26° 30' latitude at an altitude of 1300 ft above sea level with an area of 9.7 Sq.km. The population of the village increases gradually with 100 persons (2011 census). The village was established in 1876(according to the village elders) with a distance of 36 km from Mokokchung town by three (3) families. It lies in the Eastern part of the district. This village lies under the jurisdiction of EAC Chuchuyimlang, and is a part of Mokokchung. The main economy of Yaongyimti (Old) village is agriculture and they practices jhum cultivation. The fallow year for cultivation is 7 to 9 years and the main crops are rice, maize ginger, passion

fruit and orange orchard. There is also forestry which is owned privately. They cultivate rice for their own consumption and they don't use manure, fertilizer, canals, or heavy machinery because of the steep terrain and rugged topography. The crops such as ginger and passion fruit are cultivated for market through the APMC. A member of the APMC disclosed that in 2008, there were about 8 to 10 families that cultivate ginger and passion fruit, but since the income was marginal (6 rupees per 1 kg) it doesn't even make up the labor cost. It has been reduced to 3/4 families that come under cultivating the crops on a commercial basis. The villagers usually get Rs. 10,000 to Rs. 20,000 per year from the orange sold in the town.

Yaongyimti (Old) village has its own lifestyle and it differentiates the villagers from the other villages of the district. The people of this village are of Chang tribe, migrated from Tuensang and settled in the Langpangkong range, thus it is an Ao village, but the villagers are Chang by tribe and their dialect is also of Chang. Except for some non-local Government employees like teachers, all the inhabitants are tribals.

4.6.7 Moayimti Village

Moayimti village lies in Tsurangkong range near Mariani, Assam, above 200ft above sea level at a latitude of 26° 20' and longitude of 94° 35' and was formed in 1964 from Yimjenkimong village with 216 households (2011 census) which is an increase from 81 households (1981 census). Their main source of livelihood is paddy field and betel nuts and leaves and the village is famous for it. But the crops cultivated are for their own consumption. The

main reason for the formation of Moayimti is because of high concentration of population in the main village i.e., Yimjenkimong village and also for better agricultural land. As the village does not have any major rivers or tributaries passing through the village and the villagers depend on rain water for their domestic purposes. The tributaries of river Tsurang such as Kongkong, Longba and korangyong streams passes through this region helping the villagers in their paddy field as their agricultural filed lies in the low flat plain and irrigation facility are tap through these streams. One major finding in this village is that the water in the village is full of iron and it has caused sickness in the village but since there are no dispensary and sub-centre in the village the villagers has to go to Mangkolemba or Mokokchung town for medical treatment. Another interesting feature is that women can hold Goanpora post in the village. The birth rate exceed death rate and the population of the village is 222 (2011 census).

4.6.8 Aliba Village

Aliba village with an area of 29 Sq.Km, 1050ft about sea level and lies in 94° 25 Longitude and 62° 25 latitudes 16 kms away from the district Headquarter. The village perimeter is one of the smallest villages which have witnessed many changes in its socio-economy. The village is economically developed, and population growth is minimal. The population of the village was 752 (1981 census) and it has increased by 58% with 1044 in 2011 census with 179 households in 1981 which has increased to 304 households (2011 census). The affect of immigration is minimal, and the settlement patterns of

the village are compact in nature. The village being near to the main town and also due to the agricultural boom such as cucumber during summer and oranges during winter many village people living outside the village also retreat back to the village and start working in the field. The cucumbers of Aliba are famous all over the state. Being a small village the village has all the social structures such as electricity, water supply, road connection, communication facilities such as telephone etc. being near the town has its advantages so that the cultivators could sell their agricultural products and can return home in one day. Thus socioeconomic infrastructure of the village is high as compared with the other villages.

4.6.9 Yimchenkimong Village

The area of Yimchenkimong village is situated at an altitude of 700 ft above sea level and located at 26°45' Longitude and 94° 35' Latitude. The total population of the village is 1420 (2011 census) which is 61% increased from 1981 census with 290 households (2011 census) an increase from 162 households (1981 census). The formation of the village is around 900 years old initiated and formed by 23 people of different clans, namely, Noksen, Walling, Longchar, Tsudir, Ozukum and Lemtur. The village is connected by two roads via Changki as well as from Tuli road connecting with Amguri which is their main business linkages.

The village also comes under the male dominated village because the men folks hold the main functionaries of the village. It is revealed that women

participation is on VDB, self-help groups and in church activities. One interesting fact of the village is that, though the village is small comparing with other villages, it has two churches of the same denomination which creates more social discords among its members and the churches are located on top of two hilltops facing each other. No other denominations are established in the village. The issues of illegal immigration also do not arise but some Nepalis are settled in the village from a long time, making them a domicile of the village. The main source of income for the villagers is from betal leaves and overwhelming majority of the villagers is engaged in agriculture.

The village has deep virgin forests with various medicinal plants and animals. The village witness moderate type of climate, with the maximum temperature of 22°C and dry spell of climate in winter season. The village has two river sources namely Milak and Tsurang, around which the villagers has paddy fields as well as jhum cultivation. In the absence of awareness programmes on conservation of forest, most of the resources are depleting at a faster rate, and birds and animals which are used to be found in Tsurang and Milak forests are now been extinct. It is observed that most of the birds and animals are vanishing from their forests which were plentiful in the past.

The village population is steadily growing but not at a fast rate as most of the villagers went to the town areas for better livelihood such as Tuli town, Mangkolemba and Waromung village which is nearby. Birth rate exceeds

death rate due to the better health facility and improve health care of mother and child.

4.6.10 Mopungchuket Village

The village is situated in Asetkong range with an area of 21.8 Sq. km at an altitude of 1,324ft above sea level with a distance of 16 km from Mokokchung town and lies between 94° 25 Longitudes and 26° 30 Latitudes. The population of the village has increased by 61% between 1981 and 2011 with 749 households (2011 census) which is an increased from 463 households (1981 census). But comparing with the two decades has shown that even though it is increasing there is not much increase as most of the village people are found settled in other towns and district. The main economy of the village is agriculture but the village has its own tea plantation, horticulture, stone quarry etc., which helps in the economy of the villagers. The villagers are self-sustained and are one of the richest villages comparatively. The village is the tourist and cultural hubs of the district and the main church also known as Ao Baptist Church Conference (ABAM) headquarter is located in Impur Compound under the village.

It is also been found out that children and young adult makes up the majority of the population of the village and the reason behind this is that the village is near the town and not only that the village is economically developed and almost all the villagers have their own source of income. The strong village council and the tradition and customs make this village one of the socio-

cultural hubs of the district. The village development is look by the village council and it gives equal power to the young people to look after at the beautification of the village in such a way that Mopungchuket is one of the main attractions of the district and this village in under the tourist spot of the state.

4.6.11 Satsuk Village

Satsuk village lies in between latitude 26° 20 and longitude is 94° 30 at 400 ft above sea level in the Japukong range. The population of the village has decreased by -49% between 1981 and 2011 which indicates that population explosion is not experienced in the village. The village households in 2011 are 63 which is a slight increase of 54 households (1981 census). One of the reasons for this decrease is migration of population to towns and other districts. The social structure of the village is not different from other villages as it is a patrilineal society with patches of women participation in Self-Help Group, Anganwadi and in church activities. All the decisions are made by the village council regarding the village issues. This village is rich in natural resources but poor in infrastructure. The economy of the village is agriculture and this village is located on the interior of the district a lot of hardship in term of transport and economy is prevailing. The road condition leading to this village is pathetic with unsurfaced road full of potholes and rock protruding on the road. Lack of development has made the villagers to go in search for better job avenues. The village is near Longnak which is famous

for logging as such most of the villagers have settled in Longnak. Most of the business transactions are carried out with the border people and some at the Changki Gate. Accessing the market is difficult due to the road condition making it difficult to sell their agricultural products because of that the village is one of the less developed in the district as the location of the village is on the outskirts of the main road leading to Mariani town and further away from Mangkolemba town administration.

4.6.12 Chungtiayimsen Village

Chungtiayimsen village located in Merangmen circle with an area of 42 Sq.Km 67 kms away from the district Headquarter and is situated at an altitude of 200 ft above sea level and lies between latitudes $26^{\circ} 25'$ and longitudes $94^{\circ} 35'$ in the western part of the district and is under the administration of ADC Mangkolemba.

As the village name suggest most of the inhabitants came from Chungtia village which is under Ongpangkong range and they name it New Chungtia or Chungtiayimsen. The reason for the creation of the village is because the village lies in the plain which is fertile with river source and it is good for the paddy field and for horticulture such as plantation of trees, orchards and other fruits.

The population of the village increases from 353 in 1981 to 1839 persons in 2011 which is an increase of 84% within the last three decades with 389 households (2011 census) the households has began to increase to 71

households as per 1981 census. The population of the village is high comparing with the other villages of the district which indicates that the village is suitably situated and is economically stable. But being situated outside the main district administration the village faces the social problems such as, road connectivity, water supply and health facility though there is a Primary Health Centre (PHC). The nearest town in the district is Mangkolemba which is situated on the central part of the district under Changkikong range making it difficult due to poor transportation network. Thus the villagers normally go to the Mariani and most of their business is done with the people of Assam. It is observed that though they are Ao tribal they have accepted the social living conditions of the Assam people and their personality is also like them which make them possible to deal with the people living in the border areas of Assam. The village has witnessed the impact of migration to the village from the parent village Chungtia whereby many Chungtia villagers have immigrated to the Chungtiayimsen due to its fertile rich land for their economic purposes. As such the population of the village is increasing rapidly.

One of the problems faced by the villagers is marketing their products. The village is in the border with Mariani town and most of their business transaction is done with the border people. But their agricultural products are not high to get the right amount for it. Most of the farmers in the village produced their crops for their own consumption making it difficult to sell their goods in the market. Agricultural products such as paddy rice, oranges,

betel nut and leaves, fish and vegetables are produced abundantly in the field but they are for the household and only a few products such as betel leaves and nuts are sold in the open market at a low price which does not give much profit to the farmers.

According to the village elders, the village is ideally situated on the border with Mariani town under Assam state and has faced lots of difficulties in the initial state of its formation. The climatic condition of the region is hot and humid leading to malaria and dysentery and access to the local people was difficult thereby leading them to make contact with the border people living of Assam. One of the main problems faced by the villagers were the climate as most of the villages in the district are located on the hilly part enjoying pleasant cool season all year round. But the village such as Chungtiayimsen located on the plain area has hot humid climate and cold winter making it unbearable for most of the people. However, the villagers slowly adapt with their immediate environment. Thus Chungtiayimsen even though faced with lots of physical constraint has gradually come to term with their living conditions and the villagers are self-developed economically.

The villages studied so far shows that the population distribution from 1981 to 2011 has shown steady increased and its effect on the socio-economic development though not at a large scale. The study reveals that migration takes place within the villages, to the town and from town to the villages. The socio-culture has a deep impact on the village lifestyle and it shapes the economy of the village.

The growth of population in big villages has an adverse effect on the natural environment as the need for land for agricultural practice has destroyed the forest cover. Also the unplanned mining, stone quarry and logging has affected the fragile environment as such that landslides are experiences over the years. One of the greatest effects of mining and stone quarry is that it destroys the roads, leading to sinking of land and mud slides. The practice of stone quarry which is a profitable business has brought destruction to the roads and coal mining pollutes most of the streams that flows through the villages and the agricultural fields. These economic practices though profitable to the villages has brought lot of changes to the fragile environment and which has become in repairable most of the villagers are ignorant about the long terms effect.

Chapter 5

Dynamics of Demographic and its impact on socio-economic development of Mokokchung District

5.1 Introductory statement

This Chapter deals with the changes brought to the demographic landscape and whether Mokokchung district has witnessed the demographic transition as a whole. Population growth has its deep impact on the development of the district during the last few decades and also the differences between the high birth rate and low death rate brings demographic transition in the district. This has attributed to serious problems in the state as well as the district, with the issues of illegal immigrants and the domination on the economy as well. But the demographic structure of the district shows a transition and the slow impact on the socio-economic development is witnessed since the district is a rural area with few towns like Mokokchung town. Apart from Mokokchung town where the main commercial hub is set up the two sub-towns are created out in the rural interior district to meet the needs of the villages. How far demographic transition has taken place and whether it has a positive impact on the economy of the district is being considered critically. The study of selected sample villages has focused on the population patterns and the socio-economic development of their villages as 71.2% of the population still lives in the rural area.

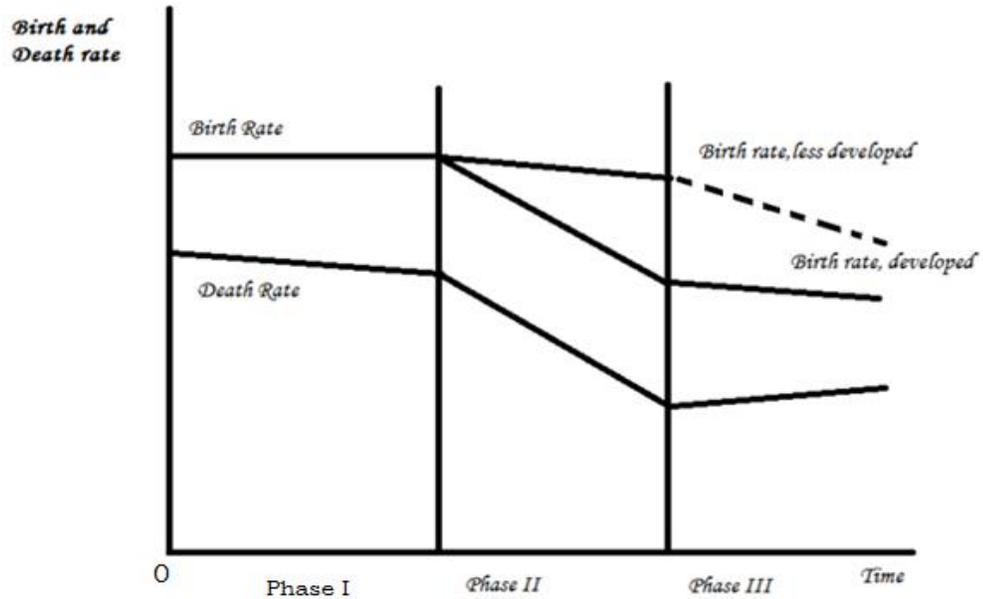
5.2 Demographic transition

Demographic transition is defined as the crude birth rate and crude death rates both of which has decreased to levels below 20 per 1,000 population. As a result of this transformation, population growth rates are at, or even below, 1 percent per annum (Cypher & Dietz 1997; 355). Demographic transition is a global phenomenon. Demographers recognized four phases of demographic transition. They are:

1. Improved health care technologies and improved access to health care result in reduction in mortality rates but, birth rate continues to be high and therefore population growth occurs.
2. There is reduction in birth rate but the reduction in death rate is higher than reduction in birth rate, as a result population increases.
3. Birth rates and death rates are both low; however population growth continues because of a large number of individuals in the reproductive age group.
4. The population level stabilizes with number of births and deaths being low and equal.

Mokokchung district is currently in the second phase of demographic transition, during which the increase in population is mainly among the 15-60 age; optimal use of this demographic opportunity window can result in rapid improvement in economic growth, nutrition and health status of the population.

Fig.5.1. Demographic Transition



Source: The Process of Economic Development, Cypher & Dietz, 1997

According to Cypher & Dietz, the changes over time in crude birth and death rates and their effect on population growth is shown in Fig 5.1 which helps in understanding the changes brought in the demographic transition since from the time of industrial revolution upto the present day. Demographic transition is achieved when the gap between CBR line and CDR line remained relatively stable. But in most of the countries CBRs increases rapidly due to improved health facilities and which also brings down the mortality rate. Thus to study demographic transition is important to understand the changes in the patterns of population.

Mokokchung district have 114 villages including their compounds and in all these rural areas the growth of 0-6 population is 7.5% with 48.80% female and 51% male children (2011 census). The highest growth is in

Ongpangkong area with 36% of the overall 0-6 year's population. Mokokchung district has witnessed drastic changes in its demographic structure due to improvement in health facilities and by the family planning programme. Also the understanding of the people to have small family size has lead to the decline in the birth rate especially in the urban areas. But in the rural areas the unplanned family sizes are due to ignorance of the people which has lead to the high number of children below the age of 0-6. The decadal child population in the age group 0-6 to total population was 10.16% in 2001 which has increased to 10.38% in 2011 in the district. The increase in the child population shows the number of the birth rate in the district which is natural increase in the growth of population. The population of the district is determined more by the birth rate than the influx of migrants. Table 5.1 show the vital rate of Mokokchung district whereby the high death rate of 43.76% in 1977 has drastically reduced to 1.53% in 2006.

Table 5.1: Vital Rates of Mokokchung district (per thousand populations)

| Year | 1977 | 1985 | 1994 | 1998 | 2001 | 2006 |
|-------------------|-------|-------|-------|-------|-------|-------|
| Live Birth Rate | 24.16 | 10.70 | 15.61 | 17.03 | 14.32 | 26.73 |
| Death Rate | 6.97 | 3.73 | 2.31 | 2.30 | 1.87 | 4.63 |
| Infant Death rate | 43.76 | 0.36 | 5.35 | 16.05 | 3.36 | 1.53 |

Source: Directorate of economics & Statistics, 2009

The increase in birth rate in the district is attributed to these factors:

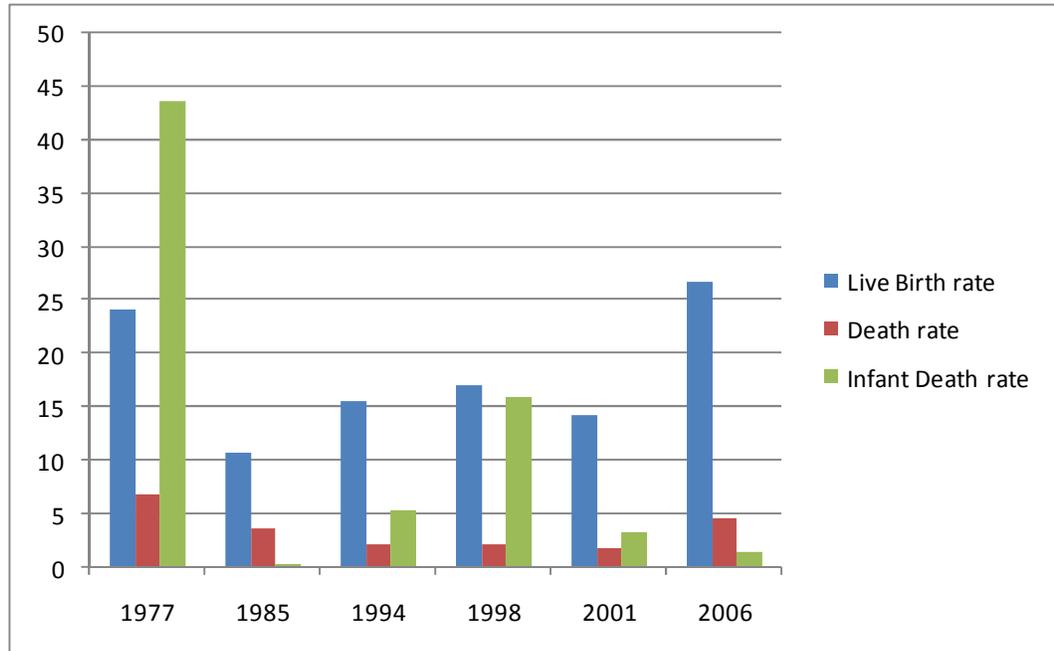
i) Unplanned family has lead to high number of children below the age group of 0-6 years. The ignorance of the people living in the villages in understanding the importance of family planning has its impact on the increase in birth rate.

ii) Improve health facilities in the urban and rural areas have gradually helped in reducing the death rate in the district. Altogether there are (1) district hospital, three Community Health Centre, eleven Primary Health Centre, five Dispensaries and one T.B Hospital in the district (2008-09). These health facilities are spread all over the blocks and circles in the district covering all the villages.

iii) The dependence on agriculture for their sustenance has leads to families to have many children especially in the rural area for cheap labor in the agricultural production.

All these has put the district in Phase II stage as shown in fig.5.2 where the crude birth rate is ever increasing and death rate has reduced drastically.

Fig: 5.2. Demographic Transition of Mokokchung district



Source: Directorate of economics & Statistics, 2009

The high birth rate also creates lot of problems to the family especially in the rural areas where the family income is through the primary source only. The health condition of the female while giving birth, lactating period and to look after the children, lack of nutritional food for both mother and the child and lack of hygienic environment are experienced in most of the sample villages. Most of the families in the villages are young parents below the age of 22 years having two to four children living with their parents as most of them are unemployed and live under the condition of hand-to-mouth.

Demographic transition helps in understanding the changing phase of population in any given region and the problem associated with it will help in maintaining a balance between population growth and economic

development. It is revealed that the high growth of population in Mokokchung district is not been accentuated by any economic development. The absence of industrial development and the unplanned stone quarry, coal mining, cutting of forest for fire woods which are being considered as the income for the family has deep effect on the environment. The problem of unemployment is another issue as the dependence on government job is high because of lack of Job Avenue in tertiary sector. It is pertinent to revive the Canning Factory in Longnak and Tuli Paper Mill so as to give employment to thousands of unemployed families. Co-operative societies should be encouraged by giving financial aid to the families to have their own income. The education of family planning is needed in the rural areas as it will improve the living condition of the villagers and have their surplus goods which can help the economy of the village in general and the family in particular.

5.3 Population Patterns

From the last four decades the population characteristics of the district is changing though at a lighter pace. This change in the population is mostly from the rural sector as Mokokchung district is made up of villages in its 6 ranges Namely, Ongpangkong, Langpangkong, Asetkong, changkikong, Japukong and Tsurangkong (Fig.5.3). The population explosion and the influx of illegal immigrants are the emerging issues in the urban centres.

However, in the rural sectors the influence of illegal immigrants is almost nil so the presence of non-tribals is negligible in most of the villages. All these villages fall under different ranges of the district. The main aim of selecting these villages is to find out the growth of population change, the socio-economic development and whether any changes are brought in their society. The population of the villages has grown steadily in the last three decades and most of these are by the natural process of birth than by migration.

Mokokchung District

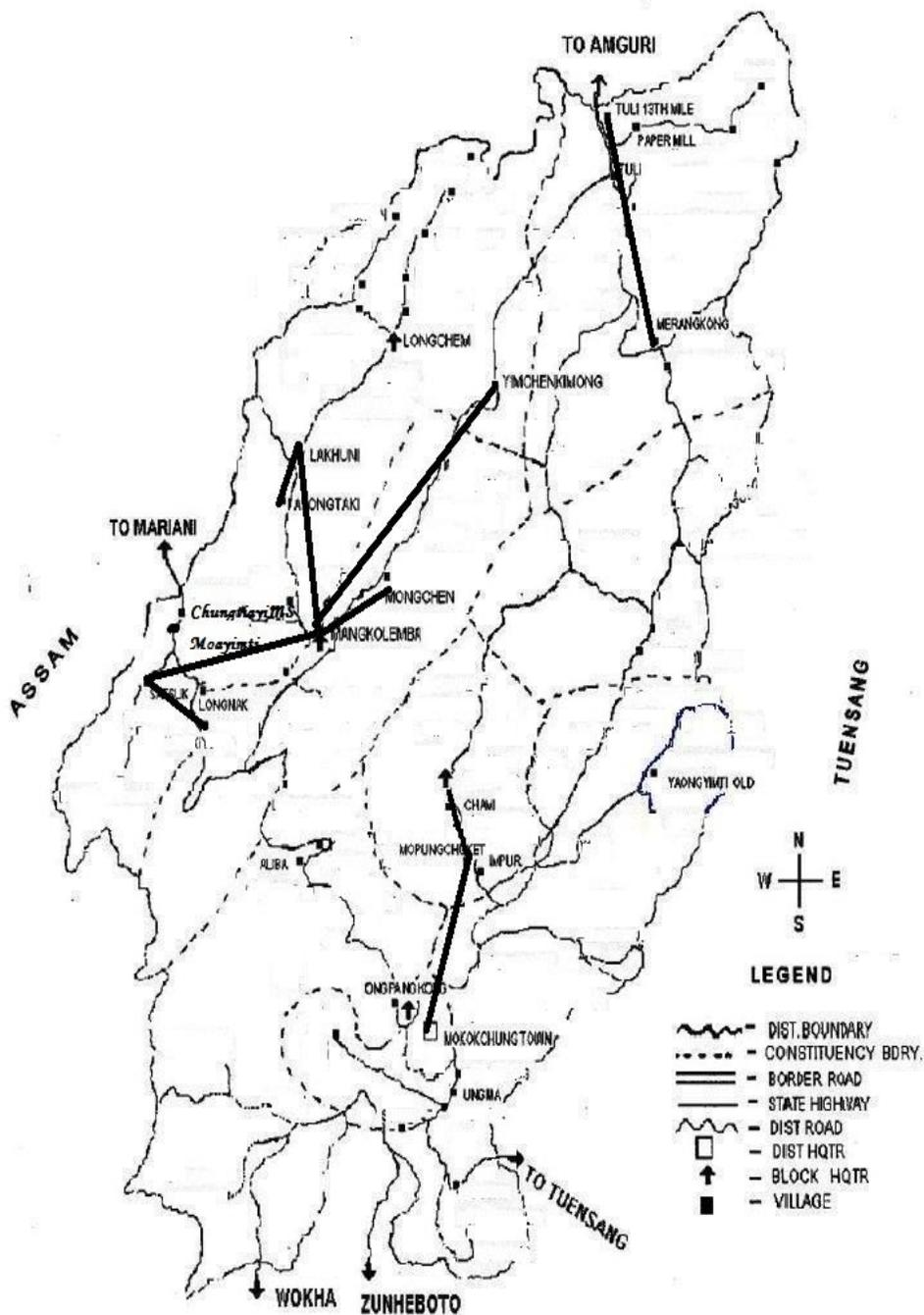


Fig.5.3: Map of Mokokchung district demarcating the sample villages

The patterns of change in population in most of these villages are migration from the rural area to the urban sectors thus slowing the process of high growth of population. The villages do have natural increase in the population but immigration is almost nil as most of the villagers rather go out in search of better job avenues. This chapter deals with the population patterns of the selected villages and whether population has growth or decrease and its impact on their socio-economic development is being analyzed.

The study of the sample villages and their population distribution are being mostly based on 1981 to 2011 census. The population of the villages is given in table 5.2. The three major villages namely Ungma, Merangkong and Mopungchuket are studied to understand the changes in their population patterns:

The field study of Ungma, Merangkong and Mopungchuket villages shows different patterns of population change over the last few decades. Ungma village situated on the southern part of Ongpangkong range, (5 kms distance) from Mokokchung town is one of the most advanced and developed villages of the district. In this village migration and out-migration are not witnessed as in the case of other villages because the village is well connected with the main town. The population of the village in 1981 was 3,870 persons which have been increased to 7,409 persons in 2011.



Plate.5.1: The oldest man in Ungma Village Plate.5.2: Oldest man in Mongchen

village



Plate.5.3: Elderly people are regarded with high esteem in the society.



Plate.5.4: Elderly people play an active role in the society

Whereas Merangkong village situated on the northern part of the district is one of the major villages in Langpangkong range with the total population of 2,557 persons in 2011 census which is an increase from 1,945 persons in 1981 has witnessed the low increase of population mainly because it is located on the outskirts of the main administrative town. The people from this village mostly migrate to industrial Tuli town. Tuli town is inhabited by overwhelming majority of Merangkong villagers. Mopungchuket village of Asetkong range is situated 16 kms away from the main district town and is one of the largest villages with the total population of 2965 persons in 2011 which is a slight increase from 1894 persons in 1981 census. This indicates that migration takes place in the village. The inward migration is less in both Merangkong and Mopungchuket villages mainly because of the need for better livelihood in the town areas. Whereas in the case of Ungma, migration from the village is not felt as most of the villagers are self-sustained and can sell their goods in the town as it is based nearby. Thus the close proximity with the town has its impact on the socio-economic development of the village.

The table 5.2 shows the population of the villages from 1981 to 2011 and all the villages has witnessed the growth of population though some villages have remained static. Mongchen in Changkikong range, Lakhuni in Japukong range, Moayimti in Tsurangkong range and Satsuk has witnessed a decrease in population due to migration to the other towns and block such as

Alongtaki where the Majority of the population is made up of Lakhuni villagers; Satsuk villagers migrating to Longnak; Mongchen villagers to Mangkolemba, and Moayimti to Tuli and Mangkolemba as shown in the map. These sub-towns are made up of people from these villages who are mostly engaged in agriculture, logging, mining, and in govt. jobs. They settled there for their children education and for better livelihood. These villages though rich in natural resources are poor in human resources because of the migration to the towns whereby elderly people dominate the other age groups of population of the villages as shown in the plates.5.1, 5.2, 5.3 and 5.4. Also the distance from the main towns hampers the economic development as they could not sell their agricultural products according to the town rates.

Table 5.2: Population distribution of the sample villages of Mokokchung district

| Village | 1981 | 1991 | 2001 | 2011 | % between 1981 to 2011 |
|-----------------|------|------|------|------|------------------------|
| Chami | 77 | 84 | 185 | 163 | 67.91% |
| Lakhuni | 473 | 763 | 1071 | 503 | 51.5% |
| Merangkong | 1945 | 3319 | 4063 | 2557 | 57% |
| Mongchen | 664 | 612 | 714 | 485 | -4.2% |
| Ungma | 3870 | 6422 | 7181 | 7409 | 66.0% |
| Yaongyimti(Old) | 410 | 559 | 794 | 1000 | 71% |
| Aliba | 752 | 839 | 882 | 1044 | 58% |
| Chungtiayimsen | 353 | 540 | 1866 | 1839 | 84% |
| Moayimti | 448 | 849 | 1609 | 222 | -33% |
| Mopungchuket | 1894 | 3776 | 5822 | 2965 | 61% |
| Satsuk | 256 | 224 | 269 | 242 | -49% |
| Yimchenkimong | 882 | 631 | 1265 | 1420 | -62% |

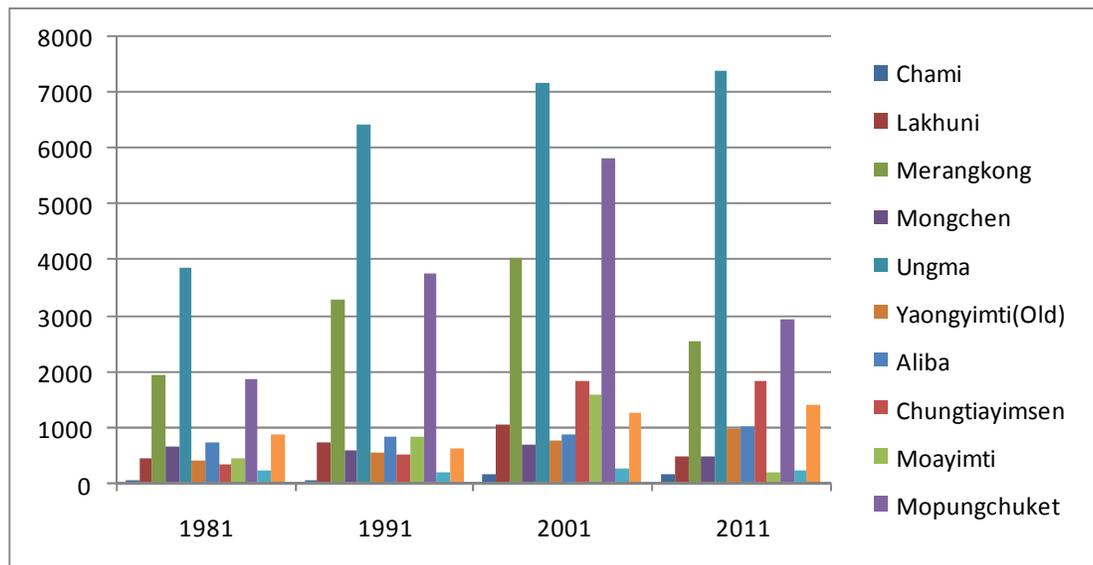
Source: Nagaland Statistical Census, 1981-2011

Yaongyimti (Old) village is an exception, that its socio-culture is different from other villages of the district as the composition of the village is made up of Chang tribe from Tuensang. Their culture, economy, livelihood and social patterns are very different even though it falls under the district administration of Mokokchung. Even their church is under the Chang Baptist Churches of Tuensang and not under Ao Baptist Arogo Mungdang (ABAM) the apex body of the Ao Churches. The population patterns of the sample

villages have indicated that the low growth of population in the village is due to migration to other areas whereas high growth of population in some villages such as Ungma is the close proximity with the town areas. Merangkong, Mopungchuket, Chungtiayimsen etc., though large in size has low growth of population due to the migration and the distance from the town areas.

Population distribution is uneven in all the villages but in all the cases there is growth in population. The highest population is in Ungma village which was 3870 in 1981 and it has increased to 7409 persons in 2011 which is an increase of 34.31% in the last two decades (Fig.5.4). Ungma village is the largest village in the district and the second largest village of the state.

Fig 5.4: Distribution of Population of the villages' from 1981-2011



Source: Nagaland Statistical Census, 2011

The population of the villages is indicated by how large the village is as indicated by the two largest villages, Ungma and Mopungchuket. The figure

shows the overall population distribution is the highest increased being in 2001. However, the government of Nagaland has rejected the census report due to inaccuracy. The sex ratio seems to be proportionate, whereas in some of the villages females outnumbered the males. Female population is increasing steadily which indicates that the need for male child is not necessarily considered as importance in most of the families.

5.4 Society and its contextual pattern

Society plays an active positive role in the respective villages and the life of the villagers revolves round their societies. Women do play active role in the family and they are the one who manage and maintained the households while the men-folk look after the affair of the villages. This shows that equal powers are given to both men and women, though women-folk does not have any participatory administrative role in the village affairs nor have any voice in it. This traditional system of functionaries in the society has been handed down from the forefathers which is deeply rooted in the fabric with full of rigid rules and regulations, norms and customs.

The winds of change brought by literacy, church activities, impact from the other societies through the effect of communication and technology has open the eyes of the villagers to accept new ideas and changes thereby incorporating women in different departments such as Anganwadi, Self-Help Group(SHG), Village Development Board (VDB), church department,

Village Education Board(VEC) and different other activities which makes up the whole fabric of the village even though women are not allowed to be members in the village councils.

The problems faced in most of the villages are road condition, water supply, irregularity of power supply, poor drainage system and lack of market facility which hampers in marketing their agricultural products. The villagers have enough land but poor in income due to lack of proper infrastructures as it becomes difficult to sell their goods in the main towns such as Mangkolemba, Tuli, Chuchuyimlang and Mokokchung town. Ungma village which is also known as mini town of the district is one of the richest villages primarily due to the close proximity with the main district headquarter and also the high number of population makes the villagers to sell their goods without much difficulty thereby making the villagers financially sound. It is been said that Ungma villagers are sound in the financial management with number of people engaged in different field such as stone quarry, orchards, fisheries, plantations and business establishment in the town(Plate 5.5). As such, those agricultural activities are not given much emphasized by the villagers except for their own consumption.



Plate 5.5: Stone quarry which is one of the most profitable business in the district

Most of the surplus goods are then sold in the village and within the village surrounding markets. This makes the Ungma village one of the richest and economically sound in the district. Field survey was conducted during 2008-2011 in the sampled villages on the hypothesis of whether birth increase is for cheap agricultural labors in agricultural sectors and the villagers were made to give their view with 'Yes', 'No', 'Can't Say'. The data collected from the field study is given in table 5.3:

Table 5.3: Distribution of answers in percentage

| Sl.No | Sample villages | Ranges | Yes | No | Can't say |
|-------|-----------------|--------------|--------|--------|-----------|
| 1 | Aliba | Ongpangkong | 28% | 56% | 16% |
| 2 | Ungma | Ongpangkong | 26.6% | 63.3% | 10% |
| 3 | Mopungchukit | Asetkong | 42% | 56% | 2% |
| 4 | Chami | Asetkong | 30% | 60% | 10% |
| 5 | Yaongyimti(Old) | Langpangkong | 23.3 | 60% | 16.6% |
| 6 | Merangkong | Langpangkong | 30% | 60% | 10% |
| 7 | Mongchen | Changkikong | 20% | 65% | 15% |
| 8 | Yimchenkimong | Changkikong | 30% | 40% | 30% |
| 9 | Lakhuni | Japukong | 40% | 50% | 10% |
| 10 | Satsuk | Japukong | 30% | 45% | 25% |
| 11 | Moayimti | Tsurangkong | 35% | 45% | 20% |
| 12 | Chungtiayimsen | Tsurangkong | 40% | 53.3% | 6.6% |
| | Total | | 31.25% | 54.96% | 14.3% |

Field Survey, 2008-2011

Those says yes are mostly elderly people who think that high number of people leads to the strong foundation of their village and give protection to the village. Also helps in agricultural fields with more hands. They mostly opined that new born is a blessing to the parents as well as to the village and lament the low population in the village. Whereas those who says ‘No’ are of the view that in the past programme on birth control or family planning was unknown as most of the villagers were ignorant leading to high number of children in the family. The reason for the high number of children is due to their belief that more number of children does help in the field. However, this trend is changed and nowadays the children mostly go to the urban centres to get better education. Thus the view on high birth rate varies from old people to the younger people in tune with the change of time.

Fig.5.5: Distribution of answers by Column wise

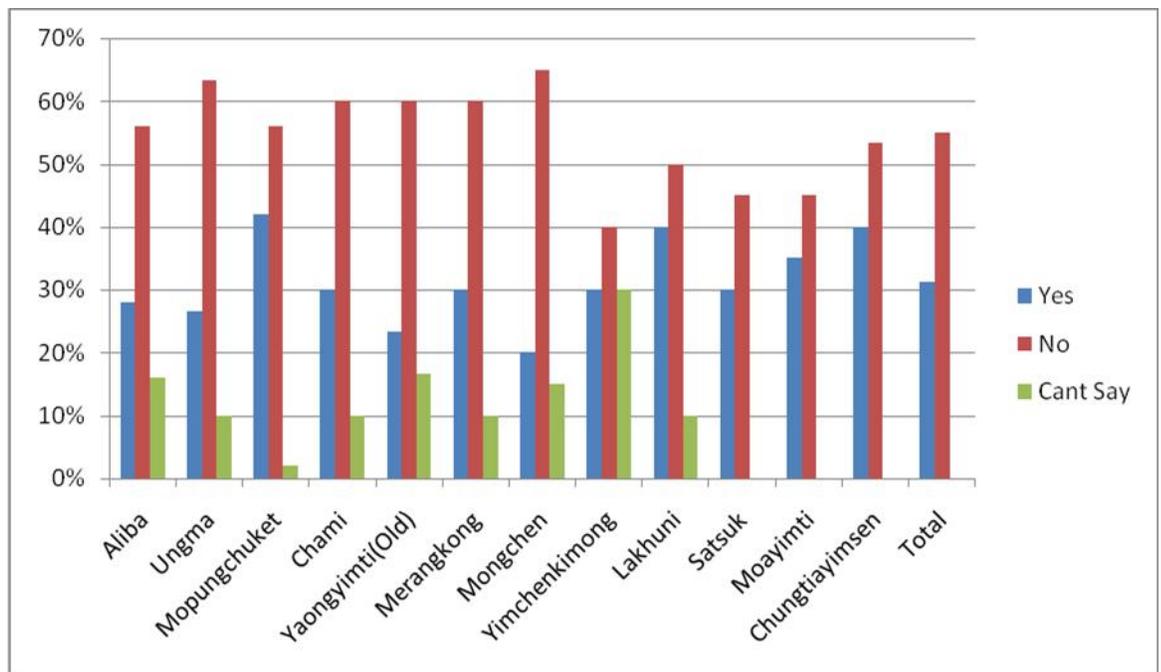


Fig.5.5 indicates the percentage of respondents in different sample villages and in all the villages the highest percentage is “No” which suggest that high birth is not been considered as cheap labor force in agricultural field. However, it was according to the time and situation that older people give different views and the younger educated people have completely different opinions. Most of them said that birth increase and high number of persons is not been taken as cheap labor force rather to send their children to school was their main aim and not for their children to toil in the fields.

In some of the villages elderly people above the age of 50 dominate the population as most of the young people live in the town and other districts. In such cases, those who reply yes are higher than No, those who says can't say are mostly women but some women opined that large family was required that time. But it does help in the agricultural activities. So it can be said that high number of birth rate which was witnessed before are being reduced to the family planning and it does not affect in the agricultural economy at all. Fewer children mean less mouth to feed.

5.5 Economic Development

Agriculture is the main stay of the people of the district and all the villages practice different types of cultivation according to nature of the slope and its topography. Shifting cultivation which is age old tradition is practiced even present day and the production of crops varies from village to village. Most

of the crops produced are hardly enough for their own consumption and not for the marketing as crops cultivation is a hard work for the cultivators. Women take active part in the field and in some villages women make up the entire cultivation process in the field (Plate 5.6).

In small villages such as Yimchenkimong, Yaongyimti (Old), Lakhuni and Mongchen the yield of agricultural crops are sold at the road site as production is higher than the consumption, but the production of rice which is the staple food of the people varies and sometimes lesser than the expectation.



Plate 5.6: Woman and children alike going to the field which is their daily activity

Most of the economy of the villagers is based on agricultural products but remote villages situated outside the towns and block headquarters face lots of hardship to transport the perishable crops. Under such circumstances they use to sell their product in the village itself, at times it is shared amongst the neighbours, friends and relatives.

Table 5.4: No. of Household of the sample villages of Mokokchung district

| Village | 1991 | 2001 | 2011 |
|-----------------|------|------|------|
| Chami | 19 | 31 | 37 |
| Mopungchuket | 554 | 697 | 749 |
| Ungma | 1320 | 1366 | 9925 |
| Aliba | 197 | 222 | 304 |
| Yaongyimti(Old) | 123 | 185 | 157 |
| Merangkong | 396 | 473 | 667 |
| Chungtiayimsen | 105 | 315 | 389 |
| Moayimti | 115 | 320 | 216 |
| Lakhuni | 117 | 181 | 126 |
| Satsuk | 42 | 54 | 63 |
| Mongchen | 152 | 153 | 132 |
| Yimchenkimong | 141 | 229 | 290 |

Source: Nagaland Statistical Census, 1991-2011

The villages that lie near the perimeter of the town are the most developed in terms of road connectivity, communication and marketing facilities than

those villages located in the interior of the district. The problem of segregation creates lots of self-importance, cautiousness and distrust and to accept new ideas and changes in the village and their economy is received with misconception and distrust. One of the problems for the lack of economic development of the villages is the lack of coordinated efforts with others. The fear of over-running by others is just a fear psychosis which is created by their own inhibition has made Mokokchung district which was supposed to be the most suitable commercial hub is to today lagging behind the other districts.

Chapter 6

Socio-economic development and commercialization of

Mokokchung District

6.1 Introductory Statement

Mokokchung district is a land of villages and the villagers depend on their environment for their sustenance. Population, environment and development are interlinked (Kayastha, 1998). The land belongs to the individual, clan and also to the village as a whole, but majority of it belongs to the individual. The decision for cultivation of virgin forest land is decided by the village council who demarcate the land thereby leaving the cultivated land for fallow period which is mostly for 4 to 7 years which vary from village to village. This practice of shifting cultivation has rendered most of the forest to grassland even though there are plantations at a wide scale in every corner of the district. “The earth’s carrying capacity in the 21st century will be a matter of economic decisions at least to the same extent as it will be a matter of sufficient natural resources. Three aspects are most important: the conditions of international agricultural trade, the dissemination of agricultural technology, and the implantation of functioning incentives structures” (Heilig, , 1995: 213).

In order to find out the development and the spread of resources base of a region it is important to study the density and predictability (Dyson-Hudson and Smith, 1978; E.A. Smith, 1987; Sankar, 2008). Density is the mean average value of the resource per square mile and predictability mean the inverse of the variance in the value of the resource per unit of time per square mile, with the allied assumptions that the probability distributions are not overly correlated across spatial groupings of land, and not overly correlated

over time. The first is characterized by high density and high predictability and the second by low density and low predictability (Sankar, 2008). Mokokchung district though rich in natural resources has low density and low predictability as the district practice the common-property holding where the villagers are confined only to their specific area. This has rendered the district to a basic level of development where the resource base is low and predictability level is less.

Predictability of the region can be increased from the improvement of technologies in terracing; irrigation and using of high yielding varieties of seeds and opening to market for their crops can increase their resource density. The villages in the district who are mostly farmers depend on the land for their cultivations has yet to achieve the high density for lack of market value and the problems of transportation, and perishability of goods. Most of the villages are located on the hill top and their agricultural land are also on the slope of the hills which is a hindrance for the use of heavy machinery and irrigations, thereby resulting into dependences on monsoonal rain for their cultivation. At times selling in the market is negligible as whatever crops they produce is for their own consumption. The lack of development in the district is the socio-psychological attitude towards industrial development (Goswami, 1998:129) as the society does not like the entrepreneurs from outside the district to invest in their land which greatly affect the economic development and the influence of outside business establishment is negligible which hampers the market value of their products.

5.2 Effects of economic development in the district

The terms ‘economic growth’ and ‘economic development’ are sometimes used interchangeably. It is important, however, to distinguish between the two. Economic growth is defined simply as an expansion of output for a given economy. Economic development entails ‘growth plus change: there are essential qualitative dimensions in the development process that extend beyond the growth or expansion of an economy through a simple widening process’ (Meier 1995, emphasis in original; Beall & Fox, 2009). The environment is itself a gigantic capital asset. The portfolio of assets a household holds depends on what is available to it (Sankar, 2008). The need for development of a region and to maintain an environmental balance is a challenge before the people and policy makers as Socio-economic development has an acute impact on the environment in the case of the rural areas, as the main source of economy in the villages is agriculture.

The district is principally ‘Ao’ speaking with fragmented concentration at the urban area and wide disparities in standard of services and facilities and inadequate linkages. Inadequate social infrastructure is one of the important factors for the development in the district as all the resources are in the hands of the villagers and the people of the district though educationally advanced still follow their age old tradition which is so rigid that does not attract investors to invest in the district. It is also revealed that the lack of civic sense such as water and power, housing and daily amenities makes the district as well as the urban area lagging behind other urban areas.

No doubt the district has natural resources such as coal, petroleum, clay, and forest resources abundantly available but lack of investment is the constraints for the development. The people of the district fears that to lose their land is to lost their lives and allowing others to emigrate and settle in their land would one day lead to their lose of identity and their birth right to the land and when there is multitude of immigrants into their land the tribal people will reduce to minority class of people in their own land. This fear is one of the main causes for the lack of development of the district. Most of the people of the district live in the villages and to influence the mind of the villagers is not that difficult and many an unscrupulous politicians and leaders take advantage for their own personal gain. Lack of communication with other regions has leads to the under development in social infrastructure.

Mokokchung town which is a political hot-spot of the state is now facing population downslide which is very important for any constituency. The reason for this decrease is also the lack of emigrants in the district and also the effect of 'Survival 2007'. In regards to the question on the growth of population and the influence of illegal immigrants a survey was conducted by asking 'Does illegal immigrant gives rise to high growth of population? Yes/no/cant'say' in Mokokchung town where the questions was posed to media persons, students, retirees, govt. employees and businesspersons and the percentage are given in table 6.1:

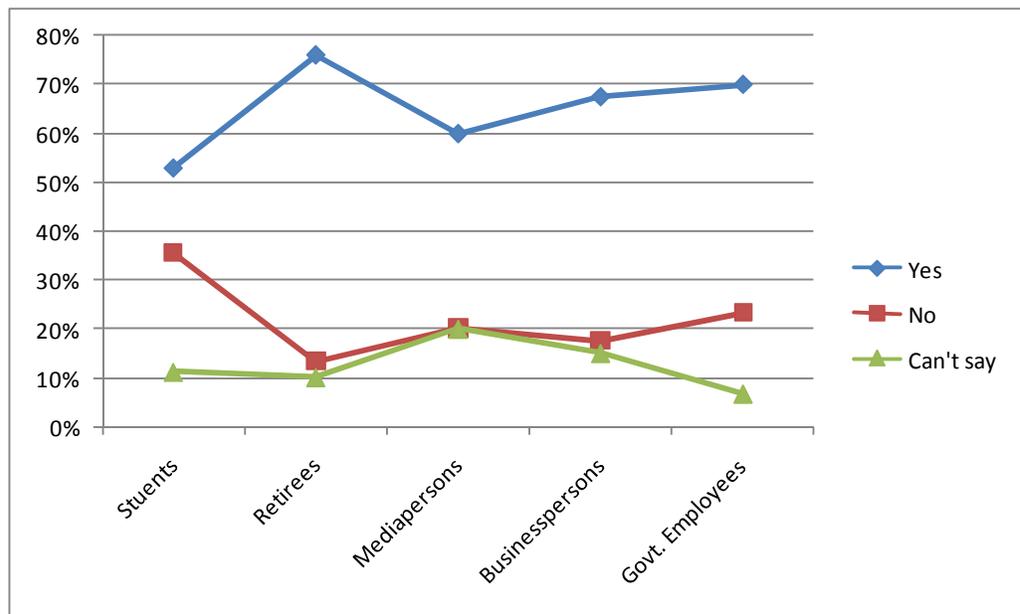
Table 6.1: percentage from the respondents

| Respondents | Yes | No | Can't Say |
|-----------------|-------|-------|-----------|
| Students | 53% | 35.5% | 11.1% |
| Retirees | 76% | 13.3% | 10% |
| Media persons | 60% | 20% | 20% |
| Businesspersons | 67.5% | 17.5% | 15% |
| Govt. Employees | 70% | 23.3% | 6.6% |
| Total | 65.4% | 22% | 12.6% |

Field Survey, 2008-2011

The view of the majority of people of Mokokchung town is that the increase in population is due to the influx of illegal immigrants especially Mias from Bangladesh which has adverse impact on the socio-economy of the town. Almost all the people said that illegal immigrants has deep impact on population growth with 65.4% expressing yes whereas 22% said No and 12.6% persons said Can't Say. The reason why most of the interviewees said yes is looking at the total population of Mokokchung district and also the business establishment of the non-locals.

Fig 6.1: Line chart indicating the percentage of respondents answers



Field Survey, 2008-2011

Fig 6.1 shows the views of the people of the district with the respondents replying yes to the question. This indicates that it will take a long time for the people to shed the fear of illegal immigrants. Whereby not delving into the real matters of whether Mokokchung district is facing acute growth of population or decreasing in numbers which has a deep impact on the electoral roll of the district is not been deem fit for consideration.

The people of the town opined that illegal immigrants especially the Mias were dominating the business establishment and it was the one of the main reason why 'Survival 2007' was initiated so as to give opportunities to the local youths. Also the 2001 census which shows the drastic increased in the population has put the fear in the people's mind whereby Mias will dominate the society in long runs. Those who says No are the one who were recently interviewed in 2010-11 and they said that illegal immigrants though

they affect the socio-economy is also a part of the society in such a way that both said also gain. They opined that with or without the Mias the population of Mokokchung district both in rural and urban areas were not been affected much as the 2011 census shows. Rather they said that it will affect in the electoral roll of the region. Those who said ‘Can’t say’ are of the view that it might be that there were high number of illegal immigrants but no one is sure because of the rejected 2001 census and also whether it was for personal gain or just the myopic views of the local inhabitants.

Overall the survey has found out that majority of the people were of the view that illegal immigrants were rampant in Mokokchung town before 2007 and what the student body did was highly appreciated by the local populace.

5.2.1 Effects of ‘Survival 2007’

Mokokchung town which is one of the commercial hubs of the state witnessed an unprecedented uprising against the illegal immigrants who hold most of the business establishment in the town. The AKM also known as Ao Kaketshir Mungdang(Organization) which is the apex student body of the district started to check the authenticity of the permit hold by the non-Nagas settled in the town. In this process it was found out that there were more 50,000 illegal immigrants (no authentic data available) and they were mostly Bangladeshi also known as Mias. They were the bread of the town as they hold the entire business establishment. In this context the student body

verifies their permit and those who are found with forged documents were given a dateline to leave the town and the district. These checking, verification and consequent deportation of illegal immigrants was known as '*SURVIVAL 2007*'.

When asked about how many non-Nagas are presently settled in the town and the answer was more than 2000 and they are mostly Marwaris, Biharis, Punjabis, Assamese, Bengali and South Indians. Before 'Survival 2007' the business establishment was under the non-locals and after the 'survival' most of the shops are taken up by the locals and young entrepreneurs. In the main Shopping Complex in the town there are 119 shops all are owned by the local youths. But one irony of this is that the income for the town is not that high even though it has given lots of employment to the local youths. There are lots of merits as well as demerits in Survival 2007 which are given below:

Merits:

- (a) It has given lots of employment to the people of the town.
- (b) The problems of overpopulation and its effect on the society are curbed.
- (c) Most of the unemployed youths have now had their own source of income.
- (d) The action of the AKM has made the district administration to look into the border issues so that illegal immigrants are checked before entering the district.

Demerits:

- (i) Mokokchung district was one of the commercial hubs of the district before 'Survival 2007' as most of the non-locals who have set up their business in the town have customers from other districts such as Zuneheboto, Longleng, Tuensang. But after the survival all these business entrepreneurs have dispersed to those districts and established their own businesses. Also most of the goods brought from Assam are bought from the same people who are been chased out from the district. Thus the business establishment concentrated only with the local populace have destroys the image of a commercial town in the state.
- (ii) The tax payment to the MMC (Mokokchung Municipal Council) was much better before the 'survival' as most of the business establishment made the payment of their taxes directly on time even though they don't have any ownership permit. But after the survival the exchange of ownership of shop changes drastically.
- (iii) The increase in cost of commodities has also been experienced after the survival. The main cause for the increase in price is that the traders has started buying goods from the same shopkeepers who were once settled in Mokokchung but now settled in Mariani and Jorhat. Comparing the prices in the past before 'Survival' it was the cheaper as the non-Nagas businessmen

used to bring their own goods by their own means and sold it in the open market.

‘Survival 2007’ which was taken with much gusto by the people of the town has faced lots of hurtles even though it was initiated for the betterment of the people of the town. However, to some extent the negative effect on the economy of the town as well as the district which has destroyed the fragile economic development are not been given much emphasis as the fear of over running by the illegal migrants was the primary interest which has leads to the survival strategy.

The issues of over-population and influx of immigrants were much talked about, but looking at the larger interest one can see that Mokokchung district has less population as compared to other district and the people are all Ao-Naga tribe and few tribals from other districts and from the main land India. The restriction of Inner Line Permit and political turmoil and the resistance of local people make it difficult for the outside entrepreneurs to enter the district (Goswami, 1998: 129). This restriction to private entrepreneurs from outside the state has affected the development growth. Dependence on other states for manufactured goods should be discouraged for the state has full of incentives. Almost everything is with the local people now and therefore whatever development is to be initiated it is done with the permission of the villagers.

5.3 Social impact on the economy of the district

Tradition is the means of livelihood for the people of the district and they have developed numerous rules, habits, taboos, and traditions to prevent food crisis, maintain soil fertility, or improve the environment for the next generation (Heilig, 1995: 251). The rules laid down is rigid and the villagers has to abide by it as it concern their land and their village and this rules helps in maintaining a balance between their habitat and the environment. Most of the land under a village belongs to different clans and they decide where to cultivate and where to maintain so as to conserve it. Some of the forest belongs to the village which is called '*Yimli*' meaning village land or village forest that does not allow anyone to enter without the consent of the village council and this type of *yimli* is found all over the district. Infact, it is also a hotspot for biodiversity. But presently this type of *yimli* is slowly diminishing because of population pressure and the need for agriculture rendering it to mere grassland and planned plantations. Plantation of trees are been widely practiced in many parts of the district where it was used as agricultural land in the past. However, this type of plantation of trees, though environmentally sustainable, is bad for the land as it reduces the soil fertility and uneconomical as it yield only in the long term.

The habits and taboos of the village is also an important factor for the conservation of the environment which prohibit the villagers to hunt in a specific season. Normally hunting is prohibited during breeding season of animals but it is having little effect. Even though most of the villagers of the

district are Christians they have certain taboos which were handed down from their fore fathers. These beliefs have helped in maintaining a balanced man-environment relationship since the olden days. Art.371 (A) which states that *'No Act of parliament in respect of (i) religious and social practices of Nagas; (ii) Naga customary law and procedure; (iii) administration of civil and criminal justice involving decisions according to Naga customary law and (iv) ownership and transfer of land and its resources shall apply to the State of Nagaland unless the Legislative Assembly of Nagaland by a resolution so decides'* give overall independence to the people of the district whereby they are the owner of the land, conserving as well as utilizing it without disturbing their environment. But even with the tradition, there are problems such as the gender issue where the men control the cash income and the women control food. (Sankar, 2008: 340)

The high growth of population is also one of the main causes for the rapid decline in the forest cover and these show that the ecologically sustainable population maximum is certainly below a level that is determined by physical laws, technological possibilities, or optimal economic structures (Heilig, 1995:251). The district is rich in natural resources but poor in infrastructure which creates unemployment problem in the district as well as in the state. Shifting agriculture, which originated during the Neolithic period, is still practiced in the tribal dominated areas of the North Eastern Region (Pandey, 2000: 60) and Mokokchung district is doing the same. Most of the

agricultural practices are the jhum cultivation which has adverse effect on the forest cover of the district.

Table 6.2: Area under forest covers Area (in hectares)

| Nagaland | | | | Mokokchung | | | |
|--------------|-------------------------|--------------|----------------|--------------|-------------------------|--------------|----------------|
| 1976-1977 | | 2008-2009 | | 1976-1977 | | 2008-2009 | |
| Total Forest | Village forest degraded | Total Forest | Village forest | Total Forest | Village forest degraded | Total Forest | Village forest |
| 287,557 | 207,198 | 1346400.0 | 1272956.07 | 25,673 | 18,459 | 139500.0 | 134523.21 |

Source: Chief Conservation of Forest of Nagaland, 2009

The forest cover of Mokokchung district was 88.24% in 2003. However according to the Forest data, the forest cover of the district has been increased rather than decreasing as table 6.2 shows. But looking at the present scenario the practice of shifting cultivation has rendered the forest to vast grassland. There are some villages accustomed to practice of horticulture but most of the villages are in the habit of practicing the traditional shifting cultivation. Normally during the onset of dry season burning of forest emits huge black cloud of smoke polluting the air, followed by black rain during the time of forest burning for shifting cultivation. Deforestation in the district is wide spread because of the practice of jhum cultivation(Plates. 6.1 and 6.2) and also due to the faulty development and management practices which have leads to environmental degradation and increased the frequency and intensity of other cataclysmic disasters i.e. erosion, landslides, floods, droughts, desertification etc.(Satendra,2003:28).



Plate 6.1: Stack of fire woods for sale which were cut down from the barren land in the background, cleared for cultivation.



Plate.6.2: A common sight in the district where most of the forest has become grassland due to Jhum cultivation

Most of the people are ignorant about the effect caused by the burning of forest and the ill effect on the health. The district is a hilly region and the villagers burn the forest blackening the land because they said that blackens soils makes the soil more fertile and also the yield of agricultural products are high. The practicing of sowing and planting rice in the hilly area has been going on since time immemorial and the practice of other cash crops were not that common as the villagers believed soil degradation can occur if the wrong crops are cultivated. But contrary to general belief, in sub-tropical conditions most export crops tend to be less damaging to soils rather cereals and roots crops (Sankar, 2008:340). One of the main causes for the lack of practice of horticulture is the lack of subsidy to the villagers (but at present some of the villages near the main town are getting agricultural subsidies for plantations of trees, cash crops such as tea, oranges, passion-fruits, flowers, etc.) But still then most of the villagers who are living at hand to mouth situation need the cereal crops for their nutrition and when the women income decline as the proportion of cash cropping increases, the family nutritional status deteriorates (Sankar, *ibid.*).

The district has witnessed tremendous changes since the last few decades but one thing that remains us constantly is the social structure based on tradition. Looking at the ground reality it is found that women play a decisive role and knows more about the environment than their male counterpart. It is the women who toil in the field to bring food on their table, who knows the change in climate that will affect their crops, who keeps the environment safe

without their knowledge by their works. Looking at the bigger scenario it can be seen that it is the women who are unofficially the safe keeper of their environment but the paternal society of the district did not and does not allow the women to take part in any decision making, rather they are bound by tradition. To establish a “co-relation between economic development and the environment and to safeguard the environment they live in can be help by the decision-making by women, since it is the women who are the actual users of these resources and thus know something about the ecology of the matter”. (Sankar, 2008). The maintenance and protection of the environment can be done when both men and women take equal parts in the decision-making and also to bring changes in the rigid old traditions of the villages and accept new ideas, not only for getting quick bucks but for their healthier wellbeing and development of their villages.

Mokokchung district apart from the Government administrative functionaries has well organized social set up looks upon the society. There are many NGO's such as Ao Senden the apex body of the civil organization, Watsu Mungdang the apex women body, Ao Kaketshir Mungdang (AKM) the apex study body and newly created Mokokchung Town Lanur Telongjem (MTLT) who delves in the socio issues of the district as well as a whole and the town in particular. Also the Senior Citizen Forum and Concern Citizen Forum of Mokokchung Town actively monitor and participate in the overall socio-economic, cultural and political development and issue of the district. These are some of the organizations which along with the district administration

look upon the welfare of the district. It can thus be said that organizations are the back bone of the district and the main decision makers of the district.

5.4 Urbanization and commercialization of Mokokchung District

Development of a region leads to the surge of people to the region in search for better jobs and livelihood and this has created an urban haze. Urbanization and commercialization of a region is predominantly an important aspect of economic growth which is caused by the high growth of population concentrated in an area where there is availability of work. Economic growth and economic development are regarded as primary stimuli for urban growth and urbanization (Beall & Fox, 2009). Mokokchung town under Mokokchung district has witnessed a rapid change since the last few decades and commercialization has taken much step which has brought development and this has lead to the migration of people from villages, neighboring districts and from other states to settle in the town thereby creating an urban centre in the district. The nature of economic activities in a town or city, in simple terms, relates to production at three levels: primary, secondary and tertiary. The character of urbanization depends very much on the type of economic production going on in the city. (Ramachandran, 1989:83). One of the consequences of the urbanization of societies has been the development of a marked separation between public and private spheres. The emergence of the spatial division between public and private has created

new opportunities for self-consciousness and self-development (Braundel, 1979; Lofland, 1973; Tuan, 1982; Fitpatrick &Lagry, 2000).

Mokokchung district has witnessed tremendous changes and 'one of the distinctive features is their spatial structure. Space is what keeps everything from being in the same place, and in so doing, space greatly differentiates urban life' (Fitpatrick &Lagry, 2000). The town located on the south western part of the district has been occupied by different sections of people from the villages, other districts and from other states. One of the main reason for this high concentration of people in the town is for education, job and for setting up of businesses. The district has different sub-towns like Tuli town and Mangkolemba town but these falls under different blocks or circles. Thus the main metropolitan town in the district is the one located in Ongpangkong range which is the main headquarter of the district. It has become a metropolitan town with a population of 34,432 persons (2011 census) creating an urban place in the rural district and it is the commercial hub of the district. It is one of the most advanced towns in the states and caters to the needs of the people even from other states such as Tuensang, Zuneheboto, Wokha and Longleng and also for medical treatment too. Urbanization of the town is at a slow pace as compared with the other districts as the town does not have the infrastructure for developmental activities even though most of the people living in the urban area are engaged in secondary and tertiary sectors. The less urbanized states have the following characteristics;

- (a) They are hilly or mountainous

- (b) They have larger proportion of tribal population and
- (c) They are generally inaccessible with respect to metropolitan cities and the main arterial railways connecting them. (Ramachandran, 1989).

The increase in population in the town has led to the rise in the demand for more goods which are not available in the town and this has led to the exports of goods into the town from Assam. Also the problems of sanitation, pollution and drainage which are some of the issues that elude the people of the town as the urban centre create the feeling of individuality even though the people are settled in different community. The feeling of oneness is absent even though it is a neighborhood based area, but one good aspect of the urban sector is that they have the rights over their own land and are free to do as they want to and the problems of slum settlement are not visible in the district. The true magnitude of the crisis of water supply and sanitation in cities of low-and middle-income countries is difficult to assess as statistics on urban services are patchy and frequently unreliable. (Beall & Fox, 2009).

Among the most visible characteristics of subsistence markets place are the severe constraints on traditional economic resources, and the consequent uncertainty and lack of control for consumers over many aspects of day-to-day life.

Table 6.3 shows the distribution of population in Mokokchung town which has 18 wards (2011). The population of these wards fluctuates as there are many inter-ward movements of people and also moving to other districts in

search of job opportunity and transfer to different departments. Mokokchung town since becoming an outpost for administrative purposes has not seen rapid development during the decade 1961-71. Mokokchung town was a class 7 with a total population of 6158 in 1961 which gradually acquire the status of a class 6 town with a total population of 17,423 in 1971. The status of the town has not shifted from the Class 6 position till the present day. The urban population of the district is increasing gradually since the last four decades which indicates that the migration plays an important role as well as by the natural increase of the migrants.

Table 6.3: population of different wards in Mokokchung town

| S.No | | 2012 Electoral Roll in % | | | 2011 Population Census in % |
|------|----------------|--------------------------|--------|--------|--------------------------------|
| | | Male | Female | total | total |
| 1 | Salangterm | 41% | 51.8% | 6% | 7.1% |
| 2 | Aongza | 50.5% | 49.4% | 4.8% | 5.1% |
| 3 | Kichutip | 49% | 50.9% | 3.7% | 3.6% |
| 4 | Kumlong | 50% | 49% | 11.9% | 6.7% |
| 5 | Alempang | 50% | 49.5% | 8.3% | 7.5% |
| 6 | Tongdentsuyong | 48.4% | 51.5% | 4.8% | 5% |
| 7 | Sungkomen | 50% | 50% | 4.5% | 4.6% |
| 8 | Marepkong | 51% | 48.7% | 2.5% | 2.5% |
| 9 | Majakong | 48.6% | 51% | 7.9% | 5% |
| 10 | Artang | 49.6% | 50.3% | 6.4% | 7.6% |
| 11 | Penli | 51.3% | 48.6% | 4.9% | 5% |
| 12 | Alongmen | 47.5% | 52.4% | 2.9% | 7.6% |
| 13 | Tsusapang | 46.9% | 53% | 2.1% | N.A. |
| 14 | Sangtemla | 51.78% | 48.2% | 7.9% | 7.8% |
| 15 | Dilong | 48.6% | 51% | 6.7% | 7% |
| 16 | Arkong | 50.5% | 49% | 7.9% | 7% |
| 17 | Yimyu | 49.6% | 51% | 5.9% | 6% |
| 18 | Mongsenphai | | | | 5.8% |
| | Total % | 49.31% | 50.2% | 68.42% | 17.38% |

Source: Office of the Deputy Commissioner, 2011

The highest percentage of population are found in larger wards such as Alempang, Sangtemla, Dilong, Arkong, Artang etc., a new ward was created out from kumlong ward known as Mongsenbai ward but the electoral roll of the new ward was under Kumlong ward during the survey. Thus the table 5.3 shows the high percentage of electoral voters in Kumlong ward with 11.9% of the total voters of all the wards and other big wards with high population

of average electoral roll with the highest being in Alempang with 8.3% voters. The male-female voters ratio shows a surprising trend in which it is the female with the highest voters with 50.2% as against that of 49.31% of male voters. The overall voters in the town are 68.42% of the total population and the percentage of the town population is 17.38%. this indicates that Mokokchung town which is the district headquarter plays a vital role in the decision making of the district as some of the big wards such as Alempang, Penli, Sungkomen, Tongdentsuyong, Artang, Marepkong, Alongmen, falls under three(3) of the constituencies along with other villages. The town constituency has 5 wards namely, Kumlong, Salangtem, Kichutip and Aongza. The increase and decrease in population has a deep impact on the electoral roll and also affect in the overall supremacy in deciding who gets elected in their respective constituency.

The population of the town increases steadily (though it is much lower than the 2001 census) and the electoral roll reveals the high number of women which shows that women are an important integral voter bank but so far no women candidate has ever been elected from any of the ten constituencies. The population of the town grows slowly with no major upheaval and this can be attributed to the absence of illegal immigrants in the district. The low population in the town has created many problems mainly in the electoral roll as most of these wards fall under different constituency and the low number of the electors will be taken into account if there is delimitation in the state. The electoral roll indicates a sharp decline of population which shows that

the persons age below 18 years are higher than the adult indicating the advancement of good health facility and hygienic care of the children which are influenced by the education of the masses.

The reasons for the low number of electoral names are:

- a) The high number of young adults below 18 years who are not eligible to vote.
- b) The use of voters identity card to verify the voter by taking their photos and their house number has greatly reduced the list, mainly because many eligible voters does not take it seriously to take their photo for their voter identity card.
- c) Most of the people does not know their franchise right.

The age below 18 years has increased in the town and one of the reasons is due to educational facility in the town. The child population in the age group of 0-6 in the district is 20,046 persons (2011) which make up 10.38% which is an increase from 10.16% in 2001. Students coming from the rural area to seek higher education have created a big gap in the age group between the adult and children in the rural and urban areas. The rural areas have high percentage of old people above 40 years of age who are mostly cultivators and farmers and in the town the number of children increases. Though urban living is costly, even then people find it worth-paying, as they can find out different means of livelihood and can send children for education without extra establishment. (Saikia, 1986:362; 363).

5.4.1 Commercialization

Mokokchung district is connected to Assam which plays an important role in the commercial activities, whereby the people can get easy access to the goods. Most of the villages have boundary with Assam like the Merangmen circle, Longchem circle and Tuli circle. Trade and commerce has grown largely because of the unemployment problem faced by the people of the district and this has made the town more developed and a commercial hub of the district. The main commercial hub is in the Mokokchung town at the Police Point which has the five roads connection with all the wards. This concentration of the commercial centre in the central location has made the town more attractive and profitable to the small business holder who by themselves would be unable to attract more customers and large volume of business. Urban services like education, administration, medical care, financial institutions, recreations etc have increased in the town to meet the needs of the people. These services are established in the main town so that people coming from different villages and districts could easily avail their services and most of these are set up in the Amguri Road because it is the main centre of the town.

Being the main commercial centre of the district as well as for other districts, the business mindset of the people has improved and the people are more self-sufficient than before. Though the educated people yearns for the service job as it is more secure the improvement in trade and commerce has helped the people to go for their own business entrepreneurship. One of the main

reason for the people to set up their own business is the absent of non-Naga businessmen except the Marwaris, Biharis etc. The town has witnessed the increased in the wholesale activities and the collection and distribution of agricultural inputs and implements, or the outputs, and the same for the industrial operations. Space for wholesale activities is much needed because of the loading and unloading of goods. Thus it required large area and this has brought much inconvenience to the town mainly because the town has narrow road passage and maneuvering of large trucks is difficult creating much traffic jam in the town. In order to check the traffic congestions the administration of the town makes it mandatory that all trucks carrying goods should enter the town only in the early morning so as to reduce the traffic problems.

5.4.2 Water Supply

The increase in population in the district as well as in the town has lead to water shortages due to the dependence on rainfall and lack of proper water supply in the town. Due to the rugged terrain of the town there is little scope for tapping underground water. The water supply to the town is through the natural springs, the seasonal streams and drainage channels. The pipe distribution of the water to the town is from the springs and stream which should not have any problems at all.



Plate 6.3: Children fetching water from the pond

However, the lack of storage of water reservoirs, treatment works has made the distribution of water insufficient to the whole district (plate 6.3). Reorganization and relocation of the entire existing system needs to be done in order to accommodate the entire district. The main source of water is from the Dikhu (Tzula River) river which has the requisite yield sufficient enough to meet the water requirement for the whole town and the surrounding villages.

5.4.3 Power Supply

The problems of power shortage are one of the issues face by the people of the district, and Nagaland being dependent on other state for its energy the energy purchase by the state is 475.50 MKWH in 2008-09. For Mokokchung district and the town the main source of power is drawn from the Tuli Point under “Bulk Purchase of Power” from Assam even though there is hydro electric power in the state and in 2008-09 alone the energy purchased by the state there were 475.50 MKHW, out of which the district consumed 16.01 in 2008-09 and Changtongya town with the consumption unit of 12.76 in 2008-09 (Table.6.4).

Table 6.4: Electricity Consumption per Unit (in MKWH) 2008-09

| Area | Domes tic light power | Com merci al | Indus trial | Publ ic Ligh ting | Publ ic wate r work s | Bulk | Sale s to other state s | Agri. pow er | Total |
|-------------|--------------------------------|--------------------|----------------|----------------------------|--------------------------------------|-------|-------------------------------------|--------------------|--------|
| Nagaland | 127.63 | 23.37 | 34.30 | 1.94 | 4.37 | 39.16 | 3.96 | 0.00 | 234.73 |
| Mokokchung | 10.21 | 1.54 | 3.13 | 0.03 | 1.03 | 0.07 | 0.00 | 0.00 | 16.01 |
| Changtongya | 7.72 | 0.70 | 2.06 | 0.00 | 0.28 | 2.00 | 0.00 | 0.00 | 12.76 |

Source: Statistical and Election office, Nagaland, 2009

The hydro-electric power of 80 M.W. of river Doyang has greatly reduced the dependence of power supply from Assam. But the problem of the shortage of power supply is that, Nagaland does not have a Thermal Power Plant (TPP) due to which the generation of electricity especially from multi-purpose river project like Doyang solely depends on the monsoon rain.

5.4.4 Traffic and Transportation

Mokokchung district has good connection with the other districts and with Assam. A state highway also connects these settlements from these roads, the State Highways Amguri-Tuli-Mokokchung and Mariani-Changki-Mokokchung town and further connects to Tuensang, and also via Wokha and via Zunheboto. This shows that settlements are well connected by roads even though it might not be surfaced which also indicates that roads are provided to the far flung villages so as to connect them to the mainland district (Plates 6.5).



Plate 6.4: Vehicular Movement in the main town of the district



Plate.6.5: Community people constructing the vehicular road

The town is served by three major regional traffic arteries with Amguri, Mariani and Wokha respectively and these roads are the life-line for the people of the district. These roads converge at the Police Point, where the traffic density is the highest, because all the commercial activities are set up in that centre (Plate 6.4). Inter-connecting roads between these regional routes provide access to other developed areas or wards in between them. Mariani Road which crosses through the western part of the district is the life-line for the people of the Changkikong, Japukong, Tsurangkong ranges as the villages in those ranges depend on the goods brought from Mariani, Jorhat, Dimapur, Guwahati. It is also the nearest to the railway and airport located in Jorhat. Most of the villages have business dealing with neighbouring Assam state rather than with the main town as access with Assam is nearer and also more profitable even though the goods they sold are below the market price. Also the goods brought from Mariani to the villages are cheaper than the town price. The fish sold in Changki Gate is cheaper than the fish price in the town. The reason behind this low price is that the goods are brought directly from Mariani rather than from the town.

National Highway No. 61 also known as Amguri Road passes through Tuli, Changtongya, Chuchuyimpang and Mokokchung town and plays an important role in these areas. This road connect the villages with Sibsagar Tinsukia and the villages in this area has become a mini-town such as Tuli town (3.68% of the population, 2011 census) and Changtongya Town (3.89% of the population, 2011 census), as shown in Table 6.5.

Table 6.5: Distribution of Population of the sub-towns in Mokokchung district

| Area | 2011 | % of population |
|------------------|-------|-----------------|
| Mokokchung Town | 34432 | 17.82% |
| Tuli Town | 7110 | 3.68% |
| Mangkolemba | 3711 | 1.92% |
| Changtongya Town | 7530 | 3.89% |
| Alichen Town | 4208 | 2.17% |

Source: Deputy Commissioner Office, Mokokchung, 2011

Mokokchung town with a population of 34432 falls under Class 6 town which makes up 17% of the total population of the district and is the only urban area in the district. Changtongya, and Tuli towns falls under class 7 villages and Mangkolemba with 1.92% and Alichen with 2.17% of the total population under Class 9 villages (which the IRS has classified the rural India into three (3) groups from population below 1000 to above 5000 under class 7, 8 and 9 villages).

The problems of traffic congestion are faced in the urban area owing to the bottleneck road due to the on-street parking and electrical poles which seriously impede the effective width of the roads. Due to the neglect of the road most of the black topping has been eroded and only the rock prodding out from the surface shows the real road condition of the district. Problems of water logging in the town due to lack of proper drainage also leads to the destruction of roads and makes the road unsuitable for the pedestrians during the monsoon (Plate6.6)



Plate 6.6: poor drainage has affected the pedestrians during rainy season

Some of the factors that lead to the destruction of roads are stated below:

- (a) The mismanagement of bridges and culverts which has been lying in disrepair which causes lots of hardship for the people to move freely within area.
- (b) Lack of retaining wall and the quality of the materials used to build the retaining wall which broke down during incessant rainfall leading to the destruction of roads due to landslides and subsidence of land in the region.
- (c) Most of the roads built in the district are at higher altitude which causes lots of problems for the movement of vehicles.
- (d) Most of the accidents occurred in these steep terrains coupled by the pathetic road conditions and by rash driving.

Lack of proper parking facility and double parking in the town created lots of inconvenience to the people and accidents too. Potholes and lack of proper drainage has lead to the eroding of black-topping on the road.

The increasing inter-dependence between rural and urban areas requires an adequate transportation system to provide for an easy and efficient inter-regional and intra-regional commodity and passage flows and reduce the conflict between the local, intra-regional and inter-regional traffic with rapidly increasing vehicular movements. Thus the traffic and transportation which is an integral part for the development of a region needs to be maintained properly. The organization/ mechanism that looks after the urban development planning are the Public health, engineering

department, which is entrusted with the task of ensuring water supply, maintenance of sewerage and storm water system and the Town council looks after the maintenance of sanitation and solid waste system and management. The town planning department, public work department also looks after the road and also by the Border Road organization. Also different central schemes are been implemented such as The Swarna Jayanti Shahari Rozgar Yojana (SJSSRY), which is a unified Centrally Sponsored Schemes aimed at providing gainful employment to Urban Poor, setting up self-employment ventures and community empowerment through creation of suitable community structures. Also the Jawaharlal Nehru Urban Renewal Mission aimed at creating urban infrastructure, The Asia Development Bank Assisted Programme for the North Eastern Region aimed again at creating and improving urban infrastructure. The Integrated Development of Small and Medium towns, aimed at providing basic infrastructure and amenities to small and medium sized towns. All these schemes are implemented in the district and these has brought immense changes though at a small scale.

6.3 Measures for the Growth of Population and Economic Development

Mokokchung district being one of the commercial hubs of the state has faced tremendous changes in the last few decades. The fear of the people regarding high influx of population, the fear of unemployment and the lack of industrial

development has leads to many people to seek job opportunities outside the district. Many of the village people moved to other districts such as Dimapur and Kohima because of the opportunities given in those districts. The need for better livelihood has made the people to go and search for other green pastures as such many sub towns such as Mangkolemba, Tuli, Changtongya, Chuchuyimlang and Mokokchung town has witnessed the high influx of migrants from the villages, mostly these villagers came to get their children to get better education and also to fine better jobs which they cannot find in their villages. This has leads to many problems especially in the social structures as the towns though rich could not provide for the whole masses the basic needs such as water supply, power supply, better drainage facilities etc which is a social basic necessity. As such there are lots of power shortage and lack of water supply due to high living cost.

One of the good aspects of the people of Mokokchung district is that there are not much male preferences. Rather in many of the family there are only daughters and the parents are content by it. Also in the past the need for large family was a pride for the parents and was regarded high in the society, but due to changing times and the high cost of living, family planning is been taken by the parents both educated as well as uneducated. Many families both in rural and urban areas have only one or two children which has also leads to the fall in population coupled with the migration to other districts in the state. But being a small district with limited social facilities the question arises on how these problems can be solved and what are the necessary measures

needed for giving better services to the people and the society. In such situations some measures are needed in other to find some remedies to give equal facilities to all different strata of people in the district. Some of the measures stated are given below:

(a) One of the foremost needs of the district is industry, such as cottage industry by reviving the Canning Factory in Changki village and the Tuli Paper Mill in Tuli Town. As population grows so does the needs of the people and in such scenario dependent on govt. job alone could not suffice the needs. One of the reason why other states are more developed is the strong foundation of private owned companies such as cottage industries which is been set up by the govt. itself.

(b) Co-Operative Societies should not only be in name but must be functional and active so as to give better services to the villagers. The needs to regulate the flow of money is important in order to find out how good the work is been going on.

(c) Social facilities such as power supply, roads, transport, power supply etc belongs to the people as a whole and they are a part of it. That load shedding and destruction of walls for construction purposes should be stop as these leads to landslides which affect all the people.

(d) Family planning which is been initiated by the govt. has helped the people to go for small family size which has helped in controlling the high growth of population. It also helps in the economic development of the family.

(e) The needs of the people in every nook and corner of the district is better road connection as it is the life line of the people. The villagers and the people must be made aware that just because the road passes through their village doesn't mean that they are the owners of the road, rather they are the safe guards of the road as it is the only link which help them to connect with other parts of the district. That random unplanned destruction of road by the stone quarry has destroyed most of the roads in the district especially the Amguri Roads and the coal mining Mariani Roads whereby the black topping are been covered by mud and the rocks thrown down from the hilltop has destroys the roads leading to potholes in most of the roads. Also the affect of coal mining has leads to the subsiding of lands which has destroys most of the Mariani Road connecting Changkikong and Tsurangkong and Japukong Ranges.

(f) Economic development though good for the people must be monitored by the govt. as well as by the district administration so that both the environment and development remains in a stable condition. The role of NGOs is important to check excessive usages but it is the district administration that as the head needs to protect the people that development does not affect the social structure of the district.

(g) The goal of economic development is to look forward and not inward which can help the district to achieve its distinction as a commercial centre. In such case accepting new ideas, changes both in the society is important so that every section of the people can play equal parts in the

development of the district. The need to make other communities a part of the district can help in the economic development of the district as whatever goods that are used by the people are brought from outside the state especially Assam. Making them to establish their own business can help the district to grow whereby other people from other districts could come to Mokokchung district for business transaction.

(h) women makes up half of the total population of the district but they are mostly considered as a housewives, mother, cook etc. the role of women need to be enhance so as to make the district more developed and more vibrant. The age –old tradition of male dominance needs to be unshackled so as to give equal opportunities to women if the people need to move forward. The myopic views of the men need to be change women can play equal parts along with their male counterparts. In every economic field, be it in agriculture, business establishment women are the forerunners as shown in the figs. women both young and old comes from their villages to sell their agricultural products from early in the morning till late at evening. These women after selling their products return to their home and village, catching the last bus and hurriedly cook dinner for the whole family. These are not only at small level by found in all the most 6 ranges of the district. Thus women participation in the society can have a deep impact on the socio-economic development as a whole.

These are some of the measures needed for the overall development of the district as Mokokchung district is going through a lots of changes since the

last few decades. Most of these are in the economic field. Many young entrepreneurs has crop up giving lots of self-employment to the local populace. Whenever there is economic development it has its impact on the social structures too. Thus development of both the society and economy is the needs of the hour which the people of the district can bring the change or leads to destruction if one depends only on the past glory.

Chapter 7

Summary and conclusions

A summary of findings of the present research has been presented in this chapter. This research attempts to understand the changes in the population over the past few decades and its impacts on the social and economic structure of the district. The study assumes that the population increases due to illegal immigrations and high number of populations is an important factor for labours in agricultural fields. The study also finds the anomaly in the population over the decades and the changes it brought to the age-old traditional social fabric through education and employment.

One of the greatest fears of the denizens of Mokokchung district was over-population and the influx of illegal immigrants. But it is been found that instead of over-population there is the low growth of population both in the rural and urban areas in 2011 census as against the 2001 census. The rural-urban ratio is quite different as most of the population is found in rural areas living with their traditional land. The urban population in the district is 28.81% (2011 census) while the rural population is 71.19 % (2011 census) which is a decline of 15.36% in 2001-2011. The study reveals that the ratio has changed from 8.52% in 1961 to 3.75% in 1971 as commercialization, modernization, education and transport and communication advances which leads the rural people to migrate to the urban sectors for better livelihood. The district is one of the metropolitan towns in the state but it has seen its drawback mainly because of the effect of low population growth within the last decade which has its impact on the overall development of the district. The fear of over population was one of the biggest issues as it will bring

adverse affect on the economy. This has leads to the implementation of 'Survival 2007' which checked the Inner Line Permit (ILP) of all the non-Nagas inhabiting the district. These illegal immigrants were from Bangladesh who is also called as 'Mias' and they enter the district via Assam. It has been detected in that year that more than 50,000 persons were residing in the town without the valid ILP that's why they were driven out from the district. This 'Survival 2007' has helped in checking the influx of illegal immigrants in the district at a large scale. But the study shows that the influx of illegal immigrants is not the reason for the high growth of population as people feared, but rather it leads to the downslide of population comparing with the other districts. Mokokchung district in 2001 records the highest growth of population but the 2001 census was rejected by the Govt. of Nagaland for its inaccuracy. One of the main reasons for the inaccuracy in the census was political as high number of people means high number of electoral rolls. The population of the district during 1971 census was 1, 50,819 persons and 1, 93,171 persons in 2011 which is an increased of 21.92% within the 5 decades. Population growth is rather slow comparing with the mammoth fear of over population. The district is inhabited by the scheduled tribe which accounts for 92.7% of the population in 1991 census and the non tribal makes up the remaining 7.3% of the population which is a decrease from 8.4% in 1981. Migration of people from other non tribal areas is low comparing with the fear of illegal immigrants over populating the district. The other non-tribal are from the community of Nepali, Marwari, Bihari, Punjabis, Bengali

and southern India and from neighboring seven sister states. The sex-ratio of the district is increased from 835 in 1971 to 927 in 2011 but there was no major difference from 1991 to 2011 as the increased in sex ratio was only 15 in the last three (3) decades. It is revealed finds that one of the reasons for the increase in the population of the district is through high birth rate and low death rate. Improving the welfare of the people was looked after by the Govt. since the 19th century with the establishment of the first dispensary in 1889 which was upgraded to hospital in 1908 now known as Imkongmeren Civil Hospital a premier hospital that tends the people of the district as well as the people of Zuneheboto, Tuensang and Longleng districts. This has helped the people coming from the rural areas to use the facilities for tending their sickness who cannot afford to go outside the state. Demographic transition in the district shows that crude birth rate exceeds the crude death rate because of improvement in health facilities. It helps in understanding the changing phases of population and reveals whether it affects the economic development in the district. The establishment of the hospital and setting up of different primary health centres in different circles in the district has drastically brought down the mortality rate of the child and looks after the welfare of pregnant mothers. In the past the mortality rate was high with 6.975 in 1977 but it has reduced to 4.63% in 2006.

Migration which is an ever changing movement of people is witnessed in the district since time immemorial. One of the major migratory movements is rural to urban movement also known as the intra and inter migration and

between the different districts increase the population rate of the district. Between the decades of 1961 to 1971 there is a net increase of over 130% of population from rural to urban area. Migration to urban areas has rendered the town to unplanned settlement, poor drainages system, dirty and polluted streams. The study finds that the increased in urban population has brought changes in the socio-economic development, pressurizing the land-holding and exceeding the carrying capacity of the land. Low growth rate in population is a major attributes for low development fund for both rural and urban sectors as funds are set aside where population is highest in any areas. The district has nine circles and one main town, out of which Ongpangkong circle record the highest population with 45,824 persons in 2011 census which is higher than the town area with 34,432 persons. The lowest is Longchem with 8,581 persons. This shows that the urban population is lower than the rural population and this will have drastic impact on the overall urban developmental fund. Over-population was one of the key issues for the people of the district but looking at the grass root level it is found that it is rather a reversed than what the people feared. Low population growth coupled with migration to other districts and outside the states has its all round impact on the socio-economic development. The people put children as their asset to help them in their agricultural field and that was one of the reasons why the district witnessed an increase in population since the last few decades.

Mokokchung district is called the 'Land of Pioneers' as officially declared by the state Government. The advent of Christianity has brought changes to the people of the district and it was considered as one of the most developed districts in Nagaland. Even though the inhabitants of the district are Christian they still follow certain rules, customs and habits laid down by their forefathers which is very much practice in the present day and as such all these have been incorporated in their rigid social structure. The study shows that rural population is higher than the urban population since statehood because the people put more emphasis on their land and their environment. The district is inhabited by Ao Naga tribe and their livelihood is dependent on their land and their society. Land to them is their life line and their sole property and it has been safeguarded by the constitution of India by Art.371 (A). Based on this, the study shows that agriculture is their main type of economy and hunting, logging and other land based economy is going on rapidly which thereby destroys the fragile ecosystem. This has somehow helped in maintaining the balance between man and his fragile environment. But the needs are overcome by the wants of the people and without much thought for the environment it is found that rampant destruction of the environment such as cutting of trees at large scale, hunting of animals and birds, unscientific coal mining which is also known as 'rate hole mining' and stone mining has drastically reduced the environment and has brought lots of manmade disasters such as landslide, destruction of roads, blocking of drainage system and pollution of streams and rivers. This has brought drastic changes to the land

and water resources due to improper utilization, over-exploitation and pollution as the people remain more or less ignorant about the long term consequences.

Through interaction with the people about their thoughts on the destruction of the environment most of them opine that overpopulation has leads to the high demand for land and for settlement purposes. But the study shows that it is not the cause of over population as overpopulation is not an issue for the destruction of the environment rather the greediness of the people and also the ignorance of the people that has lead to all sorts of problems that are being faced by the people. One interesting fact that can be seen by the study is that economic development is rapidly growing but the social structure remains the same as it was since time before except for the social infrastructure. Socially the people lives in a community having their own set of customs and habits under one umbrella that is Ao Senden, the apex body of the Ao Community, but except for the men, women are not allowed to take part in any events or even attend the meeting or become members in the organization since from the times of the forefathers till the present days. Women were considered as housewives, child bearer who looks after the home, cook for the husband, children and tend the farms. This has changed a lot due to education and most of the women holds high post in companies and in Govt. offices but even though they holds high post in different departments they have no voice in the society as it is still a male-dominated society. One interesting facts that is found by this study is that women are the safe keeper

of the environment as it is the women who mostly tend the farms and they know the changes brought to the environment by their action. Education of the farmers especially women folk is an important key for the safe keeping of the environment. The study also finds that social structure such as education, health are marginally above the other districts but there are lots of loopholes as misuse of funds and the lackluster attitude of the people has brought the district to its knee down.

The growth of population though slow in pace has its impact on the social structure and the need for better facilities is what people crave for. The growth of town circles have put constraint on the land as unplanned settled crop up leading to poor drainage system which affects the flow of rain water making the soil moist and erosion takes place. The output of water and power supply increases due to the demand of the people leading to water scarcity and power shortage in the district. The study shows that since Mokokchung is one of the metropolitan towns people come and settled where ever there is space without an iota for the land. Also the district is connected with two major National highways namely Mariani and Amguri which put the town as a major commercial region covering the northern and central part of the state. But one of the main problems is the rugged topography of the district that puts constraint on the overall development as it limits the availability of land for development.

The district has no slum-dwellers which show that fear of over-population and lack of settlement area is not a problem at all. Most of the people settled

in the urban areas came from the rural areas, and though they may not have all the facilities for better livelihood they do not live below poverty line mostly because they can bring goods from their villages for their sustenance.

The main economy of the district is agriculture and it is been found that the main emphasis given by the government is on the agricultural sectors and 92.5% is on the cultivation of paddy, maize. This shows that land and man are in-alienable to each other. The type of agriculture practiced in the district is jhum which accounts for more than 61% and some of the reasons are that,

- (a) It is an age-old tradition handed down from forefathers,
- (b) The rugged topography of the district allows jhum cultivation to flourish and
- (c) It is one of the cheapest means of agriculture which is labour intensive.

Agriculture being the main economy the people as well as the government gives much input in its development and as such other cottage industries such as Canning Industry in Changki and Paper Mill factory in Tuli were given the side line. There were many reasons for the non-functioning of these industries but fortunately for the Tuli Paper Mill, it is going to be revamped again. Such industries which would have given lots of job opportunities for the unemployed youths were being terminated at a nascent stage and the irony of all these is that it is the people itself who self-destroyed those industries by their ignorance and greed. Agricultural practices such as horticulture, paddy,

sericulture, orchards, tree plantation, piggery, poultry, fishery, vegetables and livestock rearing are found all over the district. The district as with all the other districts in the state is rich in natural resources, agricultural products and custom-made goods but it lacks the market. This is one of the major factors in the un-development of the district. Lack of market is accommodated by the haphazard road connectivity which is one of the main components for development of any region. It can be seen that the areas which is closely connected with the border with Assam are economically sound than those living near the district Headquarter mostly because of the close proximity with the neighboring state as market facility is near and goods are cheaper. The people of the district know the importance of economic development and as such the local entrepreneurs try their hand in all round development of the district. But one of the problems faced by the business community is that goods brought to the district are costlier as 90% of the products are brought from Assam into the district.

Economically, the growth of population does not hamper in its all round development rather it is the absence of consumer which affects the economy. It is revealed that business establishment of the district is among the local entrepreneurs and trade and income circles inside the district. This will create the problems of agency holder who will hold all the monopoly in goods that are sold in the market as the people of the district depends on the goods brought from outside the district. Overall the study finds that population changes neither has little impact on the economy nor brings adverse changes

except that less population leads to lesser development of the region. One of the greatest problems faced by the people is lack of proper roads and communication. The state highway of the surfaced road in the district is 18.00 according to 2008-09 while it is 468.68 for the state. Roads is the only means for the people of the district as it is a land lock district, due to it difficult terrain and rugged topography construction of roads faces lots of problems. Good roads and economic development goes hand to hand as production of goods needs markets and in order to supply the market it needs proper roads. Economic development in the district faces lots of hurdles due to poor road connectivity and as such rural areas which accounts for more than 80% of the population are the most deprived.

The district which does not record any slum dwellers do have its own share of people with 4.92% living below poverty line as the data shows and also through interactions with the people. Of this Ongpangkong Circle record the highest BPL mainly because it has the highest population and the lowest is the town as most of the people are employed one way or another. This shows that urban poor is lower than the rural poor, as most of the rural populace depend on their agriculture for their sustenance. Another reason for the increase in BPL is that of the low production of crops due to loss of fertility of the soil and also the increase in population.

The burning of forest for jhum cultivation has destroyed the forest cover in the district and most of the forests have become vast grassland. But according to the forest data it still covers about 88.24% of the district in 2003. Whether

the data is accurate or not, it is hard to ascertain but it is true that the forest belongs to the people who mostly lives in the rural areas and as such village forest accords 96.44% in 2008-09 whereas the forest that belongs to the government is only 3.56% in 2008-09. In this case it is imperative to let them know the importance of forest and let them take active parts in the decision making for forest conservation.

The population of Mokokchung district in the last few decades has seen its changes and its effect on the socio-economic development due to the needs of the people. The growth rate of the population is at a steady pace as the study shows and how it affects the economic development is seen by the commercial activities in the district especially in the urban areas. The lack of policy to check rampant destruct of the environment in the name of economic development is one of the greatest problems for the district. Socio-economic development is one of the greatest developments in any region in the world as better livelihood such as better housing, health, education, sanitation and clean environment is the needs of the hour. It is important to have all round development in all sectors and to achieve those people participation is important and Mokokchung district is a people's district. Without the people no laws, regulations and rules can function either by the administration or the government. That men and women should work equal, for all round development in the district as time changes so should be the myopic views of the men regarding the women as the lesser being. Thus the district can development socially and can be the frontrunner in its all round development.

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