CHAPTER II

THE NAGAS, THEIR LAND AND ECOLOGY

THE NAGAS

The Nagas are a group of indigenous people living in the North-Eastern part of India. They belong to the Mongoloid racial stock (Sanyu 1996, Jamir 1999, Government of Nagaland (GON) 2004, Nshoga 2009) and it is believed that their original home was in central China (D’Souza 2005: 7). According to the official record (GON 2004: 19), there are sixteen (16) major tribes, namely, Aos, Angamis, Changs, Konyaks, Lothas, Sumis, Chakesang, Khiamniungan, kacharis, Phom, Rengma, Sangtams, Yimchungru, Kuki, Zeliangs, Pochuries and along with these tribes there is a number of other sub-tribes. Each of these tribes have their own distinct identity and culture, is distinguished by their own unique traditional attires and the dialects they speak and varies in their social political systems as well. However, the exact number of Naga tribes cannot be specified because they are found not only in Nagaland but also in the contiguous areas of the Indian States of Manipur, Assam, Arunachal Pradesh and in the neighbouring country Myanmar as well (D’Souza 2001: 7). The reason being that the Naga inhabited areas was divided by the British rulers into different territories. Thus the Naga inhabited area, sometimes called Greater Nagaland, is divided by State and National boundaries (ibid: 7).
ETYMOLOGICAL MEANING OF THE TERM ‘NAGA’

The earliest reference to the Nagas was made by Claudius Ptolemaius in 150 A.D. in his writings Geographia (VII, ii, 18), where he described the land of the Nagas as ‘The Realm of the Naked’ (Nuh 2002: 15). However, the question of ‘Who are the Nagas? How did they come to be called Nagas?’ have attracted many scholars and researcher as even the origin of the word ‘Naga’ is yet to be settled finally. Thus an attempt has been made here to comprehend the etymological meaning of the term ‘Naga’ as given by different writers.

Many scholars have made an attempt to define the word ‘Naga’. One group of researchers has said that the term ‘NAGA’ must have been derived from the word ‘NOK’ or ‘NOKA’ which means ‘Folk’ or ‘People’ in some tribal languages. Other scholars opine that the word ‘Naga’ originated from a Sanskrit word ‘NAGNA’ which means ‘Naked’. Another view is that the word ‘Naga’ has been derived from a Burmese word ‘NAKA’ meaning ‘Ear-ring’. That is how the people who wears rings or pierce their lobes are known as ‘NAKAS’. It is said that originally the word ‘NAGA’ has been given by the Cachari King Dima of Dimapur to the legendary Rengma hero of Chokedonyu village (Jamir 1999: 128).

But here it is to be noted that though the etymological meaning of the term ‘Naga’ differs, it is certain that the term Nagas was given by others and not by the Nagas themselves. It was not used by the Nagas until the advent of the British, for each tribe or village in some cases was a sovereign independent state known as the Aos, Semas, Angamis, Konyaks etc., this term came into common usage during British rule and became more evident during the use rise of the Naga Club in 1918,
and subsequently, at the formation of the Naga National Council (NNC) as a united
Naga political institution in February 2, 1946.

**ORIGIN OF THE NAGAS**

The origin of the Nagas is often blended with myths, legends, folklores and
traditions. Some of the Naga traditions traced back their origin to their emergence
from the bowel of earth, stone and water source and some trace their origin from a
particular place. Almost all Naga tribes like the Angami-Nagas, Lotha-Nagas, Sema-
Nagas, Rengma-Nagas, Zeliang-Nagas etc., trace their origin back to
Khezhakenoma, a village situated in the present Chakhesang area of Nagaland
whereas the Ao-Nagas trace their origin from Lungterok, rock of six stones, situated
at Chungliyimi village while the Khiamniungans trace their origin from a water

The early history of the Nagas is thus sketchy. The exact traces of their
migratory routes are lost in the mists of time because they had no written historical
records. Most of what could be traced back to their origin and movements thereon
have been done only with the help of oral tradition in the forms of folk tales and
passing of accounts from generation to generation. Ancient Sanskrit scriptures
mention Kiratas, golden skinned people of the sub-Himalayan region, with distinct
culture, who migrated from their original home to the Himalayan slopes and
mountains of the East. Another view is that the Nagas belong to the Mongoloid race,
and they migrated and settled in the north-eastern part of present India and
established their respective sovereign village-states although when they came and
how they came to their present habitations are still unsettled questions (GON 2004:
20). Some believed that Naga Tribes originally migrated from the South and West of Asia to the Southern parts of India, from where they made an early move to the Indonesia Islands and got mixed up with Austric in the area. This is because of the fact that the Nagas have similarities of culture with those people of South East Asian countries like the Dyaks and Koyan tribes of Borneo in Indonesia, the Battak tribes of Sumatra in Indonesia, Igorots and Ifugaos of Phillipines, the tribes of New Guinea, Polynesian and Sarwak tribes of Malaysia and their important culture like Cowrie shell, Conch-shells and log drums similar to the canoes of Islanders, the habit of eating all types of sea creatures and their resemblance in physical structure and colour (Jamir 1999: 128-129). The only thing that is clear is that all the tribes say their ancestors came from the east and that they were settled in the area before the arrival of the Ahoms in 1228 A.D.

The migration of the Nagas, according to Nshoga (2009), probably, took place in three different successive waves, and continued for some centuries till the different Naga Tribes came to occupy the places of the present habitat. The first migrants are believed to be Angamis, Chakhesangs, Lothas, Rengmas, Semas and Zeliangs, who crossed the Chindwin valley and came to a place called ‘Samsok’ or ‘Thaungduth’ meaning ‘parting place’. The second wave of Naga migrants consists of the Aos, Changs, Khiamniungans, Sangtams, Tikhirs and Yimchungrus, who crossed the Patkai range along the course of Tizu River, and entered into the present place from western side of the Patkai range. And the third wave of Naga migrants consist of the Konyaks and Heimis, who went up along the Tunai (Chindwin) river and some of them moved towards the western side following the Hangnu river, but the rest stayed
back and spread over the areas upto Hukawn valley (Nshoga 2009: 25). And the migration of the Nagas into the present habitat was followed by the formation of the villages in which they have settled.

NAGA VILLAGE

The Nagas predominantly live in the village and are greatly attached to it. Thus, among the Nagas a person’s identity is inseparable with that of his family, clan, Khel and village. Each Naga village was a democratic unit of the tribes they represented and each village was sovereign and self-sufficient in itself (Nuh 2002: 16). The village is the institution of political, social, economic and religious organisation, where all the cultures and customs are evolved. And it was the highest political unit and the sameness of culture and shared concerns for security gave a broad common framework of meaning and held the members of the tribe together. Because of this, the term ‘village-state’ is often used in contradistinction with the Greek ‘city-state’. Within the village, a culture of caring among fellow villagers was assiduously nurtured and the bonds of kinship were usually very strong in the village (GON 2004: 37).

i. Locations: The most striking feature of the Naga village was its location on the hill-tops. This strategic location of the village on the summit of a hill or on the spurs is the direct consequence of the head-hunting culture of the Nagas. They built their village on the summit of the hill from where they could observe the approach of any outsiders especially their enemies and which would be difficult for their enemies to attack. Apart from this, the other important considerations were – (a) proximity to water source as water is the most important resource for the survival of life, (b)
Sufficient land for the people to settle and built their homes, and enough cultivable land as the Nagas were agriculturists and (c) Presence of thick forest cover as it keeps the village concealed from the enemies as well as provides the best cover for escape during sudden and surprise raids by the enemies. Moreover, the Nagas were dependent on the forest resources for their basic necessities such as firewood, timber, raw materials for house construction, basketry, handicrafts, and wild vegetables, fruits and games for their food and medicine.

ii. Local Residential Units: Another feature of the Naga villages was the division of the village into different local residential units known as Khels as among the Angami-Nagas or Mepus as among the Ao-Nagas. The Khels or Mepus are occupied by different clans and sub-clans, or the division was based on the basis of the dialect they speak as in the case of the Ao tribes, who speaks Mongsen and Chungli dialect and accordingly their village is divided into Chungli Mepu and Mongsen Mepu. The Khels/Mepus is the unit on which the social, economic and political life of the village is based on. No village decision could be taken without the inclusion and approval of all the Khels/Mepus in the village. The Khels also had the power to overrule individual clan decisions although this was avoided because of the harmful consequence for Khel unity. This is so even today despite the growth of so many community level organisations/groups and the over-arching authority of the government (ibid 2004: 41).

iii. Administration: The governance of the village among the Nagas varies from tribe to tribe. For instance, the Ao tribe has a republic form of village governance, where the selected members from the different clans form the decision making body
of the village and the Angamis has a democratic form of governance where the village elders from every Khel decide the affairs of the village. On the other hand, the Sumis has a chieftainship system of governance, wherein, the Akakau or the Chief is the supreme authority in all matters. Similarly, the Konyaks also has a chieftainship system of governance where the Ang or the king of the village acts as the supreme head in the governance of the village.

Based on these traditional systems, the Government of Nagaland enacted the ‘Village Council Act of 1967’ through which every recognised Naga village has a Village Council. Thus, at present the governance and administration of the village is carried out by the Village Council which is formed according to the respective village customary practices and usages. The Village Council is further aided by the VDB in the administration of the village affairs. In addition, the introduction of Communitisation programme in the villages by the Government of Nagaland, which involves the joint participation of the government and the communities in all developmental activities, has empowered the people at the same time helped in the functioning of the village administration.

iv. Economy: As mentioned above, every Naga village is self-sufficient in itself. Agriculture is the main economic activity of the Nagas. They practice slash-and-burn cultivation locally known as ‘Jhum’. In addition, some tribes like the Angamis, Chakhesangs and Zeliangs practice Wet Terraced Rice Cultivation alongside jhum cultivation. Moreover, rearing of livestock, forest related activities such as collection and selling of wild produces, logging, woodcraft, basketry and handicrafts, and weaving of clothes etc., form an integral part of their economic activities. In
addition, nowadays Government services such as teachers, Nurses, private sectors such as running general stores, plying taxis, small trading enterprises etc., have been introduced in the villages.

v. Family: The family is the base unit of the Naga village structure. The family is the basic domestic unit among the Nagas where each family is a unit of food production, consumption, distribution and of property ownership. They generally follow the nuclear family system comprising of the husband, wife and their children. However, in some cases the aged father or mother of the spouses or some of their kin stays with the family. The Naga society being patriarchal and patrilineal, the father is the head of the family and inheritance of ancestral property, land, field and family property is through the male members of the family.

vi. Religion: The traditional religion of the Nagas was Animism. Their traditional religious system was embedded in the world of nature where they believed in a number of benevolent and malevolent spirits and the land, forest, rivers, trees, rocks, hills and mountains were considered as the abode of these spirits. They also believed that all creatures - the birds, animals, plants were created equally by god and form an integral part of their lives. Such beliefs have important implications in the preservation of the nature and its resources by the Nagas. But with the advent of British rulers and American Missionaries, majority of the Nagas were converted to Christianity and at present there are very few individuals in some villages who still follow their traditional religion and practices.
vii. Morung: ‘Morung’ or the bachelors dormitory was the most important and primary traditional institution of the Naga tribes within the village community. Generally, each Khel has one Morung or dormitory. It was the primary learning institution that nurtured and prepared the young men for life and living. All the clan, Khel and village history, folklores and legends, songs, traditional practices, including the laws governing community living, were taught here. It also served as the fortress of the village where the young unmarried men used to sleep and guard the village (ibid 2004: 41). However, with the introduction of modern education and the advent of Christianity, the Morung institution disintegrated and at present, only the Morung house structure exist in some few Naga villages only.

viii. Village Gate: The village gate formed an important feature of every Naga village. The gate of the village is hewn out of a single tree-trunk, and engraved with various motifs, such as human figures, animal heads, hornbills, lizards, snakes, sun, moon, stars, symbolising various motives, which depicts the life and culture of the village (Nshoga 2009: 5). The gate is usually built at the entrance of the village and Khels connecting the whole village and it served as a security and defence structure, safeguarding all the people encompassed within it. Particularly in the past when head-hunting was practiced among the Nagas, it served as a defence point, shielding the villagers from their enemies. Also whenever the village was observing any genna (observance of abstinence) or festival, the village gate is sealed and no stranger is allowed to enter the village, nor was any member of the village allowed to proceed outside. Thus, it can also be said to be a structure that distinguished the ‘insiders’ and the ‘outsiders’.
But the village gate cannot be simply regarded as a protective physical structure only. It also signifies the unity and the integration of the people. The progress and achievement of the village is reflected through the cravings of the gate. A village gate is, therefore, known as ‘book of laurels’, since the entire cultural aspect and life of the people is reflected on the gate. For instance, the depiction of human head symbolised valour, chivalry, powerful warriors and popularity of the village. It also depicts the fertility cult, soul-force to increase the population of the village. The depiction of sun, moon and star symbolises the favourable weather in the village. Paddy stalks symbolises bumper harvest, while the ladies breast symbolise the capture of women and fertility of the village. Depiction of weapons, like spears, daos (Bill-hook), bows etc., symbolise the prowess in war. Engraving of the Mithun (Bison) head, which is one of the most important animals for the Nagas, depicts the progress, prosperity and achievement of the village. The other pictographic figures, such as lizards, monkey, horn-bill etc., symbolise the achievement in arts and crafts, while the frame of a gate symbolises the unity of the village (ibid: 76).

However, with the change of time, the elaborate rituals and festivals of erecting the village gate has been stopped and the wooden craved structure has been replaced by permanent concrete structures. Nevertheless, the village gate as a symbol of the unity and integration of the village, safeguarding the village still stands to this present day.
NAGAS CONTACT WITH THE BRITISH RULERS

The Nagas are known as brave, warrior tribe and were renowned for their fierce resistance to British rule. Their frequent raids into the plains of Assam prompted the British to penetrate into the dense forest of Naga Hills in the nineteenth century to establish their control over the region. The first direct contact of the Nagas with the British took place when Captain Jenkins and Pemberton led an expedition to the Naga Hills in 1832. The British relations with the Nagas may be divided into three periods. During the first period from 1832 to 1850, the British undertook military expeditions into the Naga country and established some form of control. During the second period, from 1851 to 1965, they followed a policy of non-intervention. But during the third period, which began in 1866, the British extended their control steadily (Singh 1977, quoted in Souza 2001: 18). The Nagas contact with the British rulers lead to the introduction of modern education, Christianity, money economy, westernisation, urbanisation etc., among the Nagas which further brought transformation in their society.

When India won independence from the British rule, the Naga Hills was a district in the State of Assam. On December 1, 1957, the Union Government of India took over the administration of Naga Hills district of Assam and Tuensang Frontier Division of North East Frontier Agency (NEFA) to form a separate administrative unit called ‘Naga Hills-Tuensang Area (NHTA)’. Later on, in July 1960, the Sixteen Point Agreement between the then Prime Minister of India and representatives of Naga People’s Convention resulted in the creation of Nagaland which was a part of
Naga Hills District of Assam and North East Frontier Agency (NEFA) as a constituent State of the Indian Union (Singh et al 1994: 12).

**FORMATION OF THE STATE**

Nagaland became the 16th State of India on 1st December, 1963, with Kohima as the state capital through the enactment of the Constitution (Thirteenth Amendment) Act, 1962. Covering a geographical area of 16,579 sq. km, Nagaland is situated in the North-East corner of India. The State has a distinct character both in terms of its social composition as well as in its developmental history. Statehood came as a result of a political agreement and Constitutional protection was specially provided for Nagaland under Article 371(A) of the Indian Constitution to safeguard the culture, traditions and way of life of the Nagas. Nagaland is known for its myriad tribes with their rich culture and traditions and stands out as a land of diverse tribes, systems of governance, cultures, sheer colour and variety. As the different Naga tribes hold their festivals each calendar month of the year, Nagaland is often referred to as the ‘Land of Festivals’. A common feature is that all the festivals of the Nagas revolve around agriculture which is the mainstay of Naga economy.

The total population of Nagaland is 1,978,502 as per the 2011 census, with a population density of 119 per sq km. The State comprises of eleven (11) administrative districts with fifty-two (52) blocks and 1286 inhabited villages. Each of the eleven districts- Kohima, Mokokchung, Tuensang, Mon, Wokha, Phek, Zunheboto, Dimapur, Peren, Kiphire and Longleng, is predominantly inhabited by one of the Naga tribes, thereby making each district distinct in its socio-political, traditional, cultural and linguistic characteristic. Of the eleven districts, Tuensang is
the largest, occupying 25.5 per cent of the total area of the State, followed by Kohima with 18.79 per cent. The State has a sex ratio of 931 females per 1000 males according to the census of 2011. The State also has a high literacy rate of 79.55 per cent. Christianity is the predominant religion of Nagaland but there is a small percentage of population, mostly non-locals, following different religions like Hinduism, Islamism, Buddhism etc. The languages spoken by the different Naga tribes belongs to the Sino-Tibetan family of languages but as the Nagas does not have a common language, English is used as the official language of the State and Nagamese, a creole language form of Indo-Aryan Assamese is the lingua franca of the people of Nagaland. The State is predominantly rural with 71.14 per cent of the population living in villages, generally situated on hilltops or slopes overlooking verdant valleys. The main economic activity is agriculture, engaging 63.03 per cent of the working force. The agricultural practice in the state is predominantly jhum also known as shifting cultivation and the people are intricately associated with forest for their livelihood and hence for survival. Besides agriculture, people are also engaged in rearing of livestock, weaving, black smithy and handicrafts. The State does not have any major industry and almost the entire urban population depends upon government services for employment and livelihood.
A brief profile of Nagaland is given in the table below:

<table>
<thead>
<tr>
<th>SL. NO</th>
<th>PARTICULARS</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Total Area</td>
<td>16,579 sq.km</td>
</tr>
<tr>
<td>2.</td>
<td>State Capital</td>
<td>Kohima (1,444.12 meters above Mean Sea Level)</td>
</tr>
<tr>
<td>4.</td>
<td>Population</td>
<td>1,978,508 (2011 census)</td>
</tr>
<tr>
<td>5.</td>
<td>Sex Ratio</td>
<td>931: 1000 Female: Male (2011 census)</td>
</tr>
<tr>
<td>8.</td>
<td>Density of Population</td>
<td>119 per sq.km (2011 census)</td>
</tr>
<tr>
<td>9.</td>
<td>Literacy Rate</td>
<td>79.55% (2011 census)</td>
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<td>10.</td>
<td>Literacy Rate of Male</td>
<td>82.75% (2011 census)</td>
</tr>
<tr>
<td>11.</td>
<td>Literacy Rate of Female</td>
<td>70.01% (2011 census)</td>
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<tr>
<td>13.</td>
<td>Number of Villages</td>
<td>1286 (2011 census)</td>
</tr>
<tr>
<td>14.</td>
<td>Number of Towns</td>
<td>11 (2011 census)</td>
</tr>
<tr>
<td>15.</td>
<td>Official Language</td>
<td>English</td>
</tr>
<tr>
<td>16.</td>
<td>Average Rainfall</td>
<td>2,500 mm</td>
</tr>
<tr>
<td>17.</td>
<td>Highest Peak</td>
<td>Mount Saramati in Kiphire District (3,840 meters above Mean Sea Level)</td>
</tr>
<tr>
<td>18.</td>
<td>Forest Area</td>
<td>8629 sq. kms (52.04% of State’s Geographical</td>
</tr>
<tr>
<td></td>
<td>Area</td>
<td></td>
</tr>
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<td>---</td>
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</tr>
<tr>
<td>19.</td>
<td>Main Rivers</td>
<td>Dhansari, Doyang, Dikhu, Melak, Tizu and Zungki.</td>
</tr>
<tr>
<td>20.</td>
<td>Railway and Airport</td>
<td>Dimapur</td>
</tr>
</tbody>
</table>


**TOPOGRAPHICAL FEATURES**

The terrain of Nagaland is hilly, covered by rich and varied biodiversity of flora and fauna. Although the state has a geographical area of only 16,579 sq. km the land is lush with green forests, rolling mountains, enchanting valleys, swift flowing streams and of beautiful landscape. It is one of the 25 hot spots of the world (Indo-Burma biodiversity hotspot) with respect to its Biological diversity. It has an altitude ranging from 200 meters in the plains to 38400 meters in the hill. The variations in altitude, latitude, climate and soil have given rise to a diversity of forest types, ranging from the tropical evergreen to temperate evergreen and coniferous (GON 2014-15: 1). The description of the land’s topographical features is as follows:

**i. Location and Boundaries:** Nagaland lies between the geographical coordinates of 25°6’and 27° 4’ Northern latitudes and between 93°2’ and 95°15’ Eastern longitudes. The state is bounded by Assam in the West, Myanmar on the East, Manipur in the South and Arunachal Pradesh and part of Assam on the North (GON 2004: 14).

**ii. Mountain System:** Nagaland has one of the magnificent mountain systems that extend from Chittagong hill tracts to the Patkai Mountains at a point where the
range is joined by the North-East offshoot of the Himalayas. Saramati at an elevation of 12,552 feet is the state’s highest peak and is part of the Patkai range, while Japfü, the second highest peak, measuring 9,890 feet is part of the Barail range.

**iii. River System:** Rivers form an integral part of the geography of Nagaland, which is dissected by a number of perennial as well as seasonal rivers and streams. The rivers and streams are not just an important topographical feature but are also socially significant as the rivers and streams act as traditional boundaries between the different areas of the region. The major rivers of the state are- Dikhu, Doyang, Dhansiri, Tizu, Tsurang/Disai, Barak, Tsumok, Menung, Dzulu, Langlong, Zunki, Likimro, Lanye, Dzuza, Melak and Manglu. Among the rivers, Doyang River which is a principal river of the central area of the State is the largest river and Melak River which has its source of origin in Mokokchung is the longest river (Sebu 2013:45). The rivers Doyang, Dhansiri are the major river in the west of the State, Dikhu, Melak and Tsurang/Disai are all tributaries of Brahmaputra River, whereas Tizu, the principal river in the east flows into the Chindwin river, a tributary of the Irrawaddy river in Myanmar and the Barak River flows through Cachar, Sylhet and Bangladesh before it falls into the Bay of Bengal (*ibid*: 46).

Apart from the rivers, some important Lakes of the State are- Shillio Lake, Dzudu Lake, and Chida Lake in Phek district, Awatsung Lake and Amokmelu Lake in Mokokchung district and Totsu-Wozhu Lake in Wokha district. It is said that the Shillio Lake which is situated along the Myanmar border in Phek district, resembles the shapes of footprints and is believed to be the abodes of spirits.
Therefore, the water of the lake is not used for drinking and irrigation. Another lake of cultural importance is the Awatsung (spirit God) lake at Mopungchuket Village in Mokokchung district. It is believed by forefathers that the spirit God dwells in this lake. A ceremony known as Awatsung Kulem Mong (worship of Awatsung) takes place during the drought, when there is no sufficient rain for crops and household (ibid:50).

iv. Climate: The climate of Nagaland is generally cool, genial and salubrious and varies from Sub-tropical, Tropical to Temperate. The temperature ranges from 70°F (21°C) to 104°F (40°C). The year is divided into four seasons, winter (December to February), pre-monsoon (March and April), monsoon (May to September) and retreating monsoon (October and November). The state records an average annual rainfall which varies from 2000 mm to 2500 mm. The torrential monsoon rains are an integral feature of the state’s weather. But the amount of precipitation (rainfall) and its distribution is important from the agricultural production point of view as Nagaland has approximately 71.3 per cent of its population living in rural areas that are directly engaged in agriculture which mainly depends on rain as the irrigation scope is limited in this area. There is a little rainfall during winter also and some regions in the state are subject to frost during winter season.

v. Mineral wealth: Nagaland is richly endowed with mineral resources. Coal, limestone, nickel, cobalt, chromium, magnetite, copper, zinc and recently discovered platinum, petroleum and natural gas are the major minerals available in Nagaland. The state has huge caches of unutilised and unexploited limestone,
marble, granite, petroleum and natural gas. Coal is found in Nazira, Borjan and Teru valley of Mon district. Limestone of grey to whitish grey colour is found at Wazeho and Satuza in Phek district and at Nimi belt in Tuesang district. Ores of nickel ferrous, chromite-magnetite occur in the Ultra Basic Belt at Pokhpur in Tuesang district (GON 2004: 29). Besides, resources like gold, jade and other precious and semi-precious stones are found, especially in the eastern part of the state. And rich reserves of oil and natural gas are found in the Wokha district. But Nagaland is yet to fully explore its huge estimated reserves of mineral wealth.

vi. Flora and Fauna: Nagaland is rich in flora and fauna. The state of Nagaland is covered by the vegetative growth of the evergreen tropical and the sub-tropical forests which occupy 8,62,930 hectares of land in the state. Different kinds of trees, plants, herbs and grasses are available for timber and medicinal purposes. The flora of Nagaland is dominated by the growth of the thick wooded trees like the mahogany and timber. Palm, rattan, cane and bamboo are also found in the forests of the state. Alder tree (Alnus Nepalensis) and some cedrellas which easily outgrow even the fastest growing Eucalyptus are found in Nagaland. Besides, indigenous teas are also found along the low northern slopes at the foot of the Barail. Describing the rich fauna of Nagaland, Thepfulhouvi Angami writes ‘in Nagaland there are trees so tall that shots of 12 bore guns cannot kill pigeons perched on their tops. There are bamboo species no bigger that the thumb which entwine themselves up hundreds of feet to the tops of tall trees. Again, some bamboos (D. Gigantium) are so big that several strong men are required to lift even a single piece. Then, there are bamboo species as small as a little finger but
hundred times stronger than its own size and tougher and more elastic than fibre
glass’.

Rare species of trees and plants are also found in the forests of Nagaland. The rare Shirio Lily (Lilium Shirohi) is found only in the Shiroi Mountain in Naga Country. The tallest Rhododendron in the world (108’8”) is found in Mt. Japfü. The tallest Pstenoatchium (Dzuli) is found only in Nagaland. Cymbidium Tigrinum is another beautiful orchid first discovered in Nagaland.

An interesting aspect of the flora of Nagaland is the abundance of edible wild plants and fruits. The number of edible plants found in the wild far outnumber domesticated vegetables. Even today wild vegetables from the forest constitute a very significant part of the food and livelihood of the people. Wild fruits are not only varied but are also quite plentiful. Wild grapes, wild apple, wild lemon, wild bananas, wild mangoes, wild walnut, wild mulberry, wild cherry and a host of other indigenous fruits are to be found.

Of the list of economic wild plants, there is no immediate end. The list of wild medicinal plants runs into several hundreds. Chalmugra, from the seeds of which is extracted and oil for the treatment of leprosy and ginseng which is used for curing cancer, are some of the better known medicinal plants to be found in Nagaland. Also found is the valued Coptistitia as well as other leaves and herbs for the treatment of diverse diseases and ailments. Such plants and herbs forms an important part of the Naga traditional healing practices. There are also some plants in the Naga territory that seem to be created solely for blooming and making their environs beautiful. Strains of Prunuses, Bauhenies and quite a few
others produce such enormous blossoms that they do not seem to even have branches and leaves the whole tree is just a riot of colour. There are also variety and structure of wild flowers rich both in colour and variety.

Bamboo is also found extensively in the state and it is one of the most widely used forest produces by the Nagas. It is found in pure patches as well as in association with some deciduous and evergreen species. Altogether twenty-two (22) species of bamboos have been identified in the state. *Malocanna baccifera, Dendrocalamus hamiltonii, Bambusa pallida* and *Bambusa tulda* are the dominant species of the state.

The forests of Nagaland are inhabited by diverse faunal species. Some animals and birds of striking characteristics include rare species like the singing lizards which can also fly, migratory birds which come from as far as Siberia, sliding snakes, a wide range of butterflies, tragopan and elephants in mountainous alpine conditions thrive across the state’s forest.

Animals like the leopards, tiger and the bears reside in the interior of the forest. Besides, a variety of arboreal monkeys, elephants, rhinoceros, bison, barking deer, sambar, buffaloes, porcupine, pangolins and reptiles like snakes, toads and flying lizards are found in the wooded forests of the state. Mithun (Bison) found only in the North Eastern states of India, is the State Animal of Nagaland and has been adopted in the official seal of the Government of Nagaland. It is the ritually most valued species in the state.
In addition, there are different kinds of birds, which are common to all the Himalayan regions, Myanmar and China among which pheasants, hornbill, peacock, hill partridge, warbler, quail, swift, hawk, wagtail, myna, sparrow, sunbird, parrot and cuckoo are mentionable. The Great Indian Hornbill is one of the most famous birds found in the state. Blyth’s Tragopan, a vulnerable species of pheasant, is also found in the state and is the State Bird of Nagaland. It is sighted in mount Japfü and Dzükou valley of Kohima district, Satoi range in Zunheboto district and Pfütsero in Phek district. Of the mere 2500 tragopans sighted in the world, Dzükou valley in Nagaland is the natural habitat of more than 1,000 tragopans.

LAND TENURE SYSTEM AMONG THE NAGAS

In all tribal societies, land and its management is central to the total organisation of the society. For the tribals, the land is the source of life, the main foundation of their social, cultural and economic life. But the land is not just a source of life; it is also a symbol of identity and unity which holds the family, clan and the tribe together (Longchar 1995: 71). For them, land is sacred, the material symbol through which the people become one with the Supreme Being, their ancestors, the spirits and creation (ibid: 65). As K.Thanzauva (1993) points out, ‘the land is integral to their concept of history. It is by land that they count their time, measure distance and understand their lives. It cannot be owned by legal means except by living in it’. Thus, the use of land and its ownership underlie all aspects of their social life.
Similarly, for the Nagas, land is an important natural resource, the most valued form of property for its economic, political and symbolic significance. It is a productive, wealth-creating and livelihood sustaining asset. Thus, it is considered as a priceless wealth which is a constant source of power and prestige, and a symbol of social status. Land also provides them a sense of identity and rootedness because it has a durability and permanence, which no other asset possesses. Land is considered as a ‘Gift from God’, the material symbol through which the people become one with the Supreme Being, their ancestors, the spirits and creation and therefore it is sacred.

The inheritance of land and its control among the Nagas is through the male heir as Naga society is a patriarchal society. If a person doesn’t have a son, the land is shared among the male members of the clan, since daughters cannot inherit the landed property. The Zounuo-Keyhonuo group of Viswema village in Angami Naga area is an exception. A unique feature of this group is the existence of matrilineal inheritance of land by eldest daughter upon marriage, mostly terraced paddy fields called ‘pozephü’, which is transferred in the female line from a mother to daughter (K. Kikhi and C. Kikhi 2011: 13). Moreover, the land being a valuable asset and linked to their identity, it is never sold to non-locals nor are they allowed to possess any landed property. Thus, ownership and management of land was vital and were formulated during the founding of the village ages ago according to the customs and traditions which are still in practice even today.

This traditional community-based governance and ownership of land is one of the significant features of the Naga tribe. Even in colonial times, the Naga Hill District was treated as land revenue free and later also the Assam land Revenue
Regulation was not extended to this area. When Nagaland came under the British rule in 1866 it ushered in a new era in relation to land management. The British rulers encouraged the Nagas to deal with legal matter through the agencies of their indigenous institutions and village courts except those which were of a heinous nature. Thus, during the British regime, the Nagas, by and large were allowed to continue with the customary laws which also guaranteed security to their age-old land tenure system.

Under the Indian Act of 1935, Naga Hills District became an excluded area under direct control of Governor of Assam Province. And since Assam Land Revenue Regulation was not extended to Hill District there was no land revenue system in Naga Hills District. Naga Hills Jhum Regulation (1946) was enforced with the aim to prevent improper transfer of Lands. The Revenue Administration of the District was simple enough consisting only of annual assessment and collection of house tax by the Deputy Commissioner through village headman (Ao 1980: 163). Further the management of village land and forest by the Village Council was recognised under the Nagaland Village and Area Council Act of 1978 (D’Souza 2005: 27).

After the independence of India, the constitutional arrangements provided by the British government were allowed to continue with much more elaborate provisions and scope under the Sixth Schedule of the Constitution of India. It recognised the 'status quo' in respect of the land and customs of the Naga people and provided the following provisions under the Constitution Act 1962, Article 371 A:

No Act of Parliament in respect of-
a) Religious and social practices of the Nagas

b) Nagas customary laws and procedures

c) Administration of civil and criminal justice involving decision according to the Naga customary laws

d) 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 decided (D’Souza 2005:21).

Thus, the Nagas still continue to enjoy absolute rights over their natural resources such as land, forest, and water.

Each Naga tribe has a well-defined territory. Within the tribal territory every village has a well demarcated territory with its own peculiar system of ownership of land and law that regulates it (George and Yhome 2008: 4-5). Traditionally the clans who founded the village first select the sacred and ceremonial site where they could worship and conduct religious rites. Common sites were also selected for the Morung (male dormitory), granaries and graveyards. After this they had the first choice of claiming sites for their homes as well as for cultivation. Other clans who settled in the village were also given land by the founding clans which then became their clan land. The land was thus distributed following this system. The original acquisition of ownership rights over a plot of land was through actual cultivation or use or need. However, this did not mean that an individual could stake a claim to any amount of land or exaggerate his needs. In practice, he could claim only as much land as he could actually cultivate or he actually needed for his survival (D’Souza 2005: 45).
In view of its importance the Nagas has traditionally adapted a systematic land tenure system based on the ownership. It is broadly categorised as follows:-

i. **Common village land**: The village lands are the joint property of the village and the authority to regulate its usage is vested with the Village Council. In every village, the common village lands were specifically kept for public institution like Morung (Male Dormitory), the place of worship, graveyard and for jhum cultivation and so on. These days it is utilised for constructing schools, community hall, hospitals, church and road. Moreover, individuals especially the landless and needy are allowed to cultivate in the common land. The villagers are also allowed to grow plants and freely collect materials like wood, bamboos etc., for the purpose of constructing houses and for other domestic uses but for commercial purpose, the permission of the village authorities is required. Nowadays, common land which is suitable for irrigation development is shared proportionally among the people for permanent cultivation and interested person are allowed to take up horticulture development in the common land. But the indiscriminate use of the common lands is prohibited (Longchar 1995: 67) and those who are found guilty of doing so are heavily penalised.

ii. **Clan's land**: Every clan has land earmarked for the construction of houses and cultivation lands and has woodlands within the territory of the village. The eldest person of the clan is the custodian of the clan's land and he exercises a titular right over it. Senior members of the clan are given priority to use the land for cultivation. The clan members are entitled to collect firewood from the nearest woodland of the clan. When there are surplus lands, other persons are allowed to cultivate the surplus
land with the payment of a nominal rent. Sometimes, the land belonging to the clan may be exchanged to meet the necessities of the clan and also for the payment of debt incurred by responsible leaders while performing duties and functions in relation to the clan or other public purposes. But the clan's land cannot be pawned by any individual member (ibid: 68).

iii. Lineage land: There are certain lands in the village owned by a kin group, which can be termed neither as the clan's land nor as an individual's land. These lands are acquired through inheritance, or as being their share of the common lands and as gifts. They include both house-sites and woodlands. The eldest person of the family gets priority and he is entitled to select the best side of land for cultivation, to collect wood and other materials from the land and to occupy a house site according to his choice. Here also the individual members of the kin group cannot dispose off or mortgage the lineage land against the interest of other members.

iv. Individual land: Individuals, usually individual household have land-either inherited or acquired through purchase or gift. The head of the household manages such land for the welfare of his household. The individuals have a right to share the produce of the land, to transfer holdings, and to grant rights of use to others. However, it is the moral right of the owner that the land is made available to all the needy people in case there is a surplus of land (ibid: 69). Here it has to be noted that, in case of individual land, the individual has the rights to use the land but his rights are not exclusive, the Village council has the rights to impose certain rules in the use of land (George and Yhome 2008: 6).
Thus, among the Nagas, the village community owned and regulated the land and its resources according to their traditional customs and practices to meet their needs and manage it. And as their land system is different from any other in India the problem of landless as is found in other part of the country do not arise, since ownership and management of these resources exist traditionally at the levels of individual proprietors, lineage and clan ownership and at village levels.

THE NAGAS AND THEIR FORESTS

Nagaland has a rich forest cover. Out of the State’s total land area of 16, 579 sq. km, forests occupy an area of approximately 8, 629 sq.kms, i.e. 52.04 per cent, of the State’s geographical area (GON 2015-16: 13). The share of tree cover is even higher at 80.51 per cent of the total area. Forest in Nagaland is endowed with rich flora and fauna. Valuable timbers like Hollock (*Terminalia myriocarpa*), Gamari (*Gmelina arborea*), Teak (*Tectona grandis*), Bonsum (*Phoebe goalparensis*), Titasopa (*Michelia champaca*), Sissoo (*Dalbergia sissoo*), Sal (*Shorea robusta*), Aam (*Magnifera indica*), Alder (*Alnus nepalensis*), Khokon (*Duabanga sonneroitoides*), Oak (*Quercus serrata*), Indian mahogany (*Toona ciliata*) etc, and varieties of shrubs, herbs with medicinal values, climbers, cane, orchids and different species of bamboo are found in abundance in the forest. Wild animals like flying squirrels, barking deer, jungle cat, wild boar, elephant and gibbons, and birds like red jungle fowl, common hill partridge, pheasants, pigeon, eagle, owl, dove, house sparrow are commonly found in the forest of the State.
MAP OF FOREST COVER IN NAGALAND

*The boundaries of Nagaland as shown in this map are subject to revision as provided in the 1960 Delhi Agreement. This map is without prejudice to the claims of Nagaland for re-drawing the Assam-Nagaland boundary on the basis of historical and traditional factor*
For the Nagas, forest is a valuable natural resource as it has tremendous potentials and plays an active role in the economic, social, cultural and traditional life of the people. It provides environmental stability at the same time it is a primary source of livelihood and sustenance. They largely depend on forest produces like timber and Non-Timber Forest Produces (NTFPs) such as wild edible fruits and vegetables, leaves, tubers, honeybees, medicinal herbs and plants, flowers, fuel wood and construction materials etc., and many other materials for their daily necessities. This has resulted in interdependence between the community and the forest, where the forest has sustained the community since time immemorial, on the other hand, the community protects and utilises the forest and its produces sustainably.

i. Ownership of Forest: In view of the unique land ownership system among the Nagas, based on their customary practices, majority of the land and forest is owned by the community and the individuals. The State Government owned only a small portion of forest land, which is also either gifted or brought by it from the villagers. Thus, the Village Forests are owned and managed by the individuals, clans or Khels and the community whereas the Government owned Forests are owned and managed by the State Government.

The Government owned Forest is further categorised into- (a). Reserved Forests: In Reserved forest, there is full degree of protection and all activities are prohibited unless permitted. (b). Purchased Forests: These forests are those that are purchased by the State’s Forest Department from Private owners to take up plantations and Biodiversity conservation. (c). Protected Forests: These Forests have limited degree of protection and all activities are permitted unless prohibited.
(d). Wildlife Sanctuary: The sanctuaries are areas maintained for the protection and conservation of wildlife in the State. The ownership and status of forest in the State is given in the table below-

**Table: 2 Forest Status in Nagaland**

<table>
<thead>
<tr>
<th>LEGAL STATUS</th>
<th>FOREST AREA (Sq. Kms)</th>
<th>% OF TOTAL FOREST AREA</th>
<th>% OF TOTAL GEOGRAPHICAL AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Government owned Forests:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Reserved Forests</td>
<td>62.26</td>
<td>0.72%</td>
<td>0.72%</td>
</tr>
<tr>
<td>2. Purchased Forests</td>
<td>192.47</td>
<td>2.20%</td>
<td>2.20%</td>
</tr>
<tr>
<td>3. Protected Forests</td>
<td>34.69</td>
<td>0.40%</td>
<td>0.40%</td>
</tr>
<tr>
<td>4. Wildlife Sanctuary</td>
<td>202.02</td>
<td>2.31%</td>
<td>2.31%</td>
</tr>
<tr>
<td>b. Government controlled (Private owned) Forests:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Protected Forest</td>
<td>516.79</td>
<td>5.98%</td>
<td>3.1171%</td>
</tr>
<tr>
<td>c. Village owned Forests:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Virgin Forests</td>
<td>4778.27</td>
<td>55.40%</td>
<td>28.8212%</td>
</tr>
<tr>
<td>7. Degraded Forest</td>
<td>2842.80</td>
<td>32.90%</td>
<td>17.1467%</td>
</tr>
</tbody>
</table>
Table 2 indicates that out of the total forest area, the Private/Community owned approximately 7621.07 sq.km of forest area, which is 88.30 per cent of the total forest area and 46.00 per cent of the State’s geographical area whereas the State Government owned approximately 1008.23 sq.km of the forest area, which is only 11.70 per cent of the total forest area and 6.00 per cent of the State’s geographical area. Out of the forest owned by the State Government, Reserved Forest constitutes 0.72 per cent, Purchased Forests constitutes 2.20 per cent, Protected Forest constitutes 0.40 percent and Wildlife Sanctuaries constitutes 2.31 per cent. The Village Owned Forests (Private/Community forests) are further divided into Virgin forests (Non-degraded) and Degraded forests. The Virgin forests covers 4778.27 sq. km of forest area, which constitutes 55.40 per cent of the total forest area and 28.82 per cent of the State’s geographical area whereas Degraded forests covers 2842.8 sq. km of forest area, which constitutes 32.90 per cent of the total forest area and 17.15 per cent of the State’s geographical area.
ii. Recorded Forest Area of the State: The recorded forest area of the State is 9,222 sq. km which is 55.62 per cent of its geographical area. The recorded forest area is classified as Reserved Forests, Protected Forests and Unclassed Forests.

a. Reserved Forests constitutes 0.93 per cent of the total recorded forest area. These are the Forests which have been properly demarcated and notified under the provisions of the Indian Forest Act or the State Forest Act. These are under the State control and have full degree of protection. Here all activities are restricted unless permitted.

b. Protected Forests constitutes 5.51 per cent of the total recorded forest area. These forests are also constituted under the Provisions of the Indian Forest Act or the State Forest Act. These forests have limited degree of protection and all activities are permitted unless restricted.

c. Unclassed Forests constitutes 93.56 per cent of the total recorded forest area. All other forests that come under the control of the State Forest Departments fall under this category. These may or may not be demarcated. Over these, the State Government exercises the lowest degree of control. Forests transferred from other departments and those acquired by the State Forest Departments from corporate bodies or private individuals, under suitable legislation are also included in this category. In course of time, these are constituted as protected and reserved forests.
The Unclassed Forest areas are sometimes earmarked specifically for preservation of wildlife and certain natural eco-systems through creation of National Parks, Wildlife Sanctuaries and Natural Reserves. At present the State has two Parks, the Intangki National Park and Nagaland Zoological Park and three Wildlife Sanctuaries- Fakim Wildlife Sanctuary, Singphan Wildlife Sanctuary and Puliebadze Wildlife Sanctuary.

**iii. Forest Cover:** Forest cover consists of all lands more than 1 hectare area having tree canopy density of more than 10 per cent irrespective of the tree species and its legal status or ownership or land use. As per the Department of Forests, Annual Administrative Report 2015-2016, the forest cover in the State based on the State of Forest Report 2015 is 12,966 sq. km, which is 80.50 per cent of the State’s geographical area. On the basis of tree canopy density the Forest Cover is classified into-

a. Dense Forest: This includes all land with a forests cover of trees with a canopy density of over 40 per cent.

b. Open Forest: This includes all lands with a forest cover of trees with a canopy density between 10 to 40 per cent.

Besides the category ‘Forest Cover’ there is ‘Non-Forest’ category which includes all lands without forest such as agricultural croplands, grasslands, wasteland, scrub, waterbodies, riverbeds and built up areas. Only ‘scrub’ has been classified as a separate class within ‘Non-Forest’. Scrub denotes lands having bushes and/or poor tree growth with canopy density less than 10 per cent.
According to the State’s Forest Department, Annual Administrative Report, the State has 1,296 sq. km area under Very Dense Forest, 4,695 sq. km are under Moderately Dense Forest and 6,975 sq. km under Open forest. Besides, Scrub and Non-Forest covers an area of 622 sq.km and 2,991 sq. km respectively. However, it has been observed that there are changes in the forest cover due to shifting cultivation cycle, biotic pressure and forest fire incidences. The figure below shows the forest cover in the state-

![Forest Cover](image)

**Figure: 1 Forest Cover in Nagaland**

**iv. Types of Forest:** On account of its unique geographical location and wide range of physiographic terrain, the State is endowed with a variety of forest types. According to the official classification (as per Champion and Seth), the following types of forest are found in the State-
a. Northern Tropical Wet Evergreen Forest: These forests are found only in Mon district. Before the Namsa-Tizit area was covered with this type of forests but now only a small vestige is found in the Zamkam area. The dominant species of this type of forest are Hollong (*Dipterocarpus macrocarpus*), Makai (*Shorea assamica*), Nahor (*Mesuaferrea*) etc.

b. Northern Tropical Semi Evergreen Forest: These types of forests are found in the foothills of the Assam-Nagaland border in Mokokchung, Wokha and Kohima districts. The species that make up these forests are similar to those of Northern Tropical Wet Evergreen Forests. The only difference is that in the former case, the evergreen species dominate, though there are deciduous species like Bhelu (*Titrameles nudiflora*), Paroli (*Stereospermum chelonides*), Jutuli (*Altingia excels*) etc., whereas, in the present type of forest, the number of evergreen species decreases and the deciduous species are more in number.

c. Northern Sub-Tropical Broad-Leaved Wet Hill Forest: These types of forest are found in the hills areas below 1800m and above 500m in all districts of Nagaland. It is dominated by semi-deciduous species. Some of the important timber species of these type of forest are- Koroi (*Abelmoschus*), Pomas (*Chukrasia*), Sopas (*Magnolia*), Gamari (*Gmelina arborea*), Hollock (*Terminalia myriocarpa*), Sam (*Betula nigra*), Am (*Magnifera*), Badam (*Prunus*), Betula (*Betula alnoides*) etc.
d. Northern Sub-Tropical Pine Forest: These types of forest are found in hills with elevation of 1000m to 1500m in parts of Phek and Tuensang Districts of Nagaland. Pine is the dominant species, and is found mixed with *Quercus*, *Schima*, *Prunus*, *Betula* and Rhododendron.

e. Northern Montane Wet-Temperate Forest: These types of forest are found on the higher reaches of the tallest mountains (above 2500m) like Saramati and Dzükou area. The species that dominate are Rhododendron, Oaks, Birch and Juniperus sp.

f. Alpine Forest: Alpine vegetation is found at high altitudes in ridges of Saramati range, which remains covered with snow for a major part of the year from October to April. After melting of the snow during the brief summer a few annuals, herbs and shrubs along with mosses can be seen growing there. Species of *Rhododendron*, *Abies* and *Juniperus* are found in sub alpine vegetation which gradually merges into alpine vegetation which comprises of high altitude grasses and dwarf Rhododendron. Also many members of Primulaceae, Saxifragaceae and Polygonaceae families are also found.