

**Traditional Systems of Forest  
Conservation  
In  
North East India  
The Angami Tribe of Nagaland**



**Alphonsus D Souza**

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**North Eastern Social Research Centre  
Guwahati**



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Alphonsus D Souza

**North-Eastern Social Research Centre  
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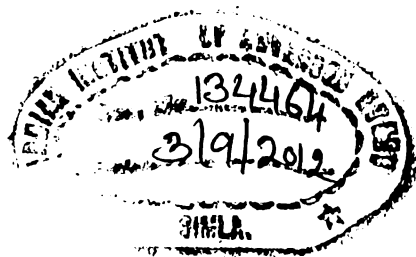
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## **Acknowledgements**

This study on the traditional system of forest conservation among the Angami tribe of Nagaland was born out of curiosity. Observing the well preserved forests in the Southern Angami area where I began to live after taking up an assignment as teacher at St Joseph's College in Jakhama, I wanted to know how and why the Angamis managed their forests. At least a partial answer to this question is found in the following pages.

Several persons have helped me in finding an answer to my question. Without naming anyone of them, I wish to thank all of them. I wish to thank in a special way the Indo-German Social Service Society, New Delhi, for the study grants and later for the publication grants.

Though I have received help from many persons, and have benefited from their views and opinions, they are in no way responsible for the interpretations and views expressed here.

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# 1

## Introduction

### The Tribal Background

Anthropologists dealing with tribal societies have pointed out that those tribes or indigenous people who depend on forests for their livelihood have elaborate traditional systems of forest management. In the past, such traditional indigenous systems of forest management have often been judged backward, wasteful and destructive. But in recent times there has been a growing appreciation of such traditional methods of forest management. This study is a contribution to a deepening of our understanding of the traditional methods of forest management, through an analysis of the nature of forest conservation and management practised by the Angami tribe in Nagaland.

Nagaland, the sixteenth State of the Indian Union, came into existence on 1st December 1963. Nagaland is situated on the north-eastern frontiers of the country (See Map 1). As its very name indicates, Nagaland is the land of the Nagas, a group of tribes racially and culturally distinct from other tribal groups living in North-Eastern India.

The origin of the Naga tribes is shrouded in mystery and is encapsulated in folklore and legends. After examining various oral sources, Sanyu (1996: 5-35) concludes that the Nagas belong to the Mongoloid racial stock and that their original home was in central China. After leaving their original habitat before the Christian era, they took different routes and gradually reached their present habitat. Their migration took place in several waves, and continued for some centuries till the different Naga tribes came to occupy the places of their present habitat.

The exact number of Naga tribes is not known because they are now found not only in Nagaland, but also in the contiguous areas of the Indian States of Manipur, Assam and Arunachal Pradesh, as also in Myanmar (Burma). Thus the Naga inhabited area, sometimes called Greater Nagaland, is divided by State and national boundaries. Another difficulty in determining the exact number of Naga tribes arises because

of the process of fusion and fission that has been taking place. Some smaller Naga tribes are absorbed by larger ones and are treated as sub-tribes, while sections of larger tribes, separated by State boundaries, sometimes prefer to be treated as distinct tribes.

According to official publications, there are 14 major Naga tribes in Nagaland. They are Angami, Ao, Lotha, Konyak, Chang, Chakhesang, Khiamiungan, Phom, Rengma, Sumi, Sangtam, Yimchunger, Zeliang and Pochury (Govt of Nagaland 1998: 1). On the basis of information available from the Census of India, the Angami is the fourth largest Naga tribe. In 1991, there were 97,433 persons in Nagaland who stated that Angami language was their mother tongue (Census of India 1991: 66). In 1991 the Angamis constituted 8.06% of the total population of Nagaland. Most of the Angamis inhabit the central and southern parts of the Kohima district of Nagaland (see Map 2)

## The Problem

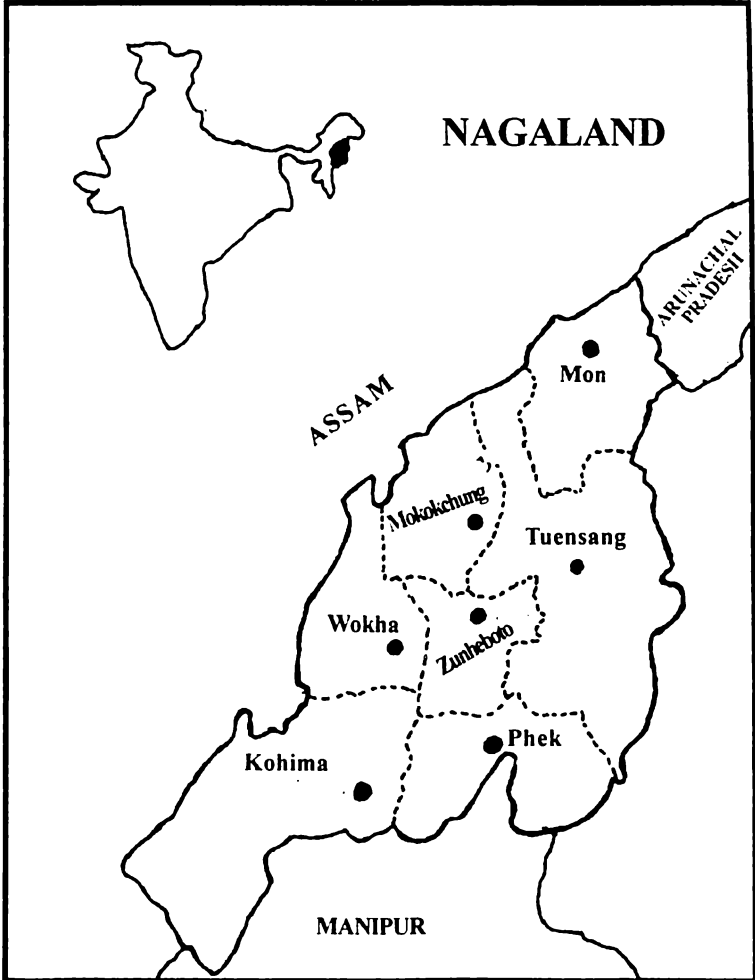
As a visitor enters the Angami country on National Highway 39, and approaches Kohima from Dimapur, he or she cannot but be impressed by two aspects of the general scenery. The first is the system of terrace cultivation, and the second is the extensive greenery due to well-preserved forests. If one moves around the Angami country, and then goes to areas inhabited by other Naga tribes, one will find that these two aspects of the surroundings distinguish the Angami country from the areas inhabited by other Naga tribes.

These two aspects, namely terrace cultivation and forests, are not a recent development. In fact, in 1914, L. W. Shakespear provided the following description:

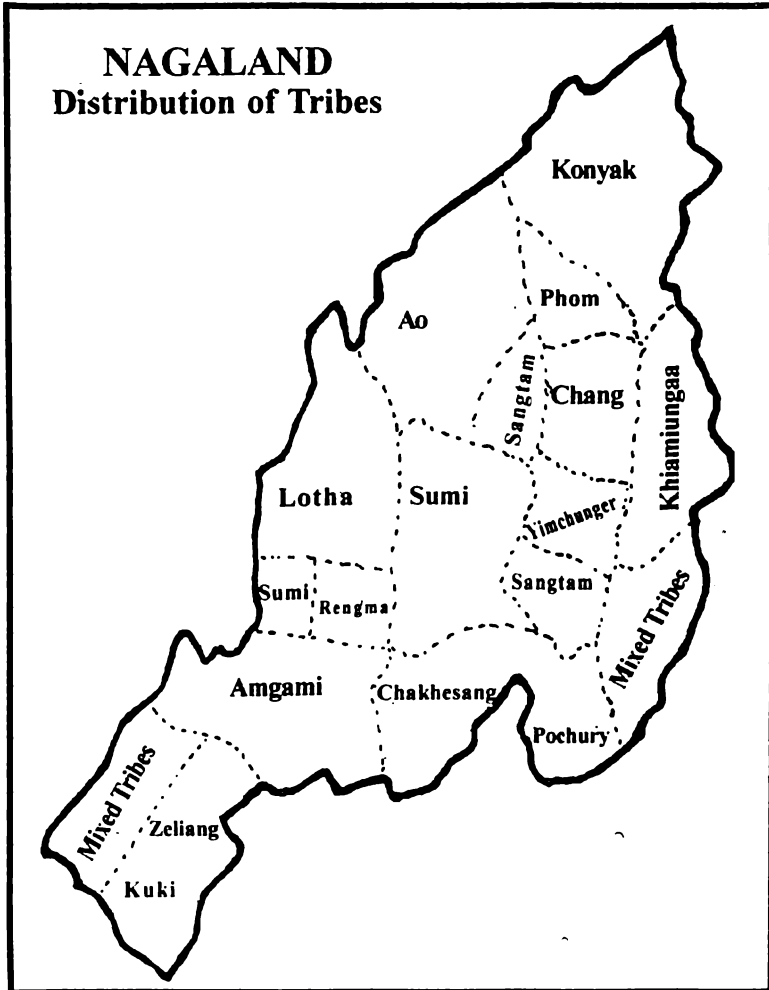
To a stranger suddenly arriving in the Angami country nothing strikes him with greater surprise and admiration than the beautiful terraced cultivation which meets the eye everywhere, on gentle hill slopes, sides and bottoms of valleys, in fact, wherever the land can be utilised in this way. In preparation, upkeep, and irrigation, the greatest care is taken, far in excess of anything seen in the northwest Himalayas. The appearance of the countryside for miles south of Kohima, for instance, is such as to suggest the handiwork



# Map 1. Position of Nagaland



**Map 2. Nagaland : Distribution of Tribes**



of labour of a far higher order of people than these wild Nagas. These terraced fields are often bordered with dwarf alder bushes, are carefully irrigated by an elaborate system of channels bringing water down from mountain streams, and luxuriant crops of rice are grown on them. To pass through the valley where stand the two powerful villages of Khonoma and Mezoma during late October when the crops are ripe is indeed a delight for the eye, a veritable golden valley (Shakespear 1940: 206-207).

If Shakespear was impressed by terrace cultivation, a modern traveller, particularly coming from an urban background, will certainly notice the fascinating greenery with its immense diversity. Though there are recently planted eucalyptus and pine trees along some stretches of National Highway 39, the rolling hills on both sides of the highway are covered by forests. It is true that most of the forests on the lower slopes of the hills are degraded. But higher peaks are surrounded by dense forests. If one proceeds beyond Kohima towards Mao on the National Highway, one will also notice that dense forests descend from the high mountain range and intrude into the terrace fields giving the impression that forests and fields co-exist in harmonious relationship.

The general landscape described above stands in noticeable contrast with the scenery in areas inhabited by other Naga tribes. For instance, if one goes from Kohima to Pfüstero, and then on to Phek, one will easily notice that there is less terrace cultivation and that the forests along the road are much younger and thinner. Till the order of the Supreme Court of India imposed a ban on extraction of timber in 1996, a traveller would also have passed scores of trucks loaded with sized logs of timber called *phanta*. At present no *phanta* is transported along this State Highway, but the hills are thinly forested and most of the trees are young. A similar, perhaps worse view meets the eye if the traveller proceeds beyond Mao to Imphal along National Highway 39. Here the hills are almost completely denuded of forests, and the few terrace fields appear to be somehow less fertile.

## **The Implications**

The contrast between the Angami habitat and areas inhabited by other tribes raises some questions in the mind of a person interested in ecological matters in general and forests in particular. Why is it that the Angamis have, by and large, preserved their forests while others have lost them? What are the methods adopted by the Angamis for the conservation of their forests? Are these methods consciously and deliberately formulated and implemented, or are they based on traditional wisdom and followed unconsciously, even instinctively? This study attempts to find answers to these questions.

There is already a general framework within which it is possible to find the answers. Anthropologists and social activists have observed that tribals and other forest dwellers generally protect not only individual trees but also forests, and even their entire ecosystems because they have deep rooted vested interests in doing so. Such vested interests are usually institutionalised in the form of well-established practices enforced by various social control mechanisms. This is because, for the tribals and many other forest dwellers, their forests are essential for their very survival. This view is expressed in the following words:

All the data at our disposal showed that traditionally the tribals had a vested interest in the preservation of forests. They had, therefore, developed a culture that ensured a proper balance between human and ecological needs. Forests were treated as a renewable resource and as a life support system that had to be preserved. In order to achieve this, in some cases they preserved entire ecosystems, in other instances they banned the use of axe and sickle on species that were economically important, restricted the use of other useful species through social control mechanisms, and ensured equal distribution of varieties that could be cut without restriction. The eco-system and the banned species were linked to the continuity of the tribe through the totem and creation myths, thus making the preservation of forests coincide with the conservation of their village or tribe (Fernandes, Menon and Viegas 1988: 320-321).

This view is applicable to every homogeneous group that controlled a land area as its community property (Gadgil 1989: 359-60). It is true

also in the case of the tribals of North East India. As Roy Burman (1986: 167) says, “close observers of the traditional practices of the hill dwellers particularly of North East India in respect of forests would be able to cite innumerable instances of how the hill dwelling communities not only protect their forests but also nurture the same.” Some scholars go further and say that there is a symbiotic relationship between the tribals and their forests. What this means is that their relationship is not unilateral but that the tribals depend on the forest and the forest in its turn depends on them for its preservation and continuity (Deeny and Fernandes 1992: 49).

This view must be seen within the broader context of the relationship between the tribals and their land, the extreme value, both material and religious, attached to the land and forest by them (Elwin 1988: 66). Such attachment arises out of the intimate relationship between indigenous and tribal people and their land, a relationship that is best described in the following words:

Indigenous peoples ancestral territories are not just their economic base, these lands are intimately bound up with their cosmologies and identities as communities, and as peoples. The landscape that they occupy is at once their home and the sacred abode of spiritual beings whose invisible presence explains the functioning of the visible world. They see themselves as stewards holding the land of their ancestors in trust for future generations (Colchester 1999: 7).

Within this general framework, the present study attempts to determine, in the first place, whether this explanation is valid also in the case of the Angamis. Secondly, this study aims at identifying the factors which are specific to the Angamis in order to understand why and how they have preserved their forests while their immediate neighbours have not done so. “There is a further and more important question which this study will attempt to answer. It has been observed that under the pressure of various factors such as commercialisation, the tribals often became destroyers of the very forests which they had preserved for centuries. Will the Angamis be able to resist such a change? What would be the strategy and social mechanisms required to resist such a change?

It is obvious that finding answers to these questions has practical

implications, by indicating possible solutions to the problem of deforestation which is beginning to assume alarming proportions even in the North East. Further, answers to the questions posed above will help us identify ways and means of managing and using forests in a sustainable manner.

This study has two parts. In the first part, a general picture of the condition of the forests in Nagaland is drawn. In the second, an attempt is made to identify the factors that have contributed to the conservation of forests by the Angamis. This part also examines the changes taking place and the manner in which the Angamis are coping with them. This study depends not only on secondary data, but also on primary data gathered through personal observation and interviews with knowledgeable persons. Secondary data on the problem under investigation are scanty because of the very nature of the problem.

The collection of primary data was made in the Southern Angami area, which has its own distinctive features. The selection of Southern Angami area was done for two reasons. The first and the weightier reason is that this area has been undergoing rapid change during the past decade. The second reason was, purely and simply the convenience of easy access. In the chapters that follow we shall attempt to understand the traditions that have preserved the greenery as well as the recent changes that go against this situation.

## 2

# **Nagaland**

## **Some General Features**

There is a vast body of literature on Nagaland. However, most of it deals with political history, with particular stress on the ethnic conflict and political problems. Scholarly writing on other aspects of Nagaland is conspicuously deficient. It is beyond the scope of this study to deal with all the aspects of Nagaland and Naga society. Yet, it is necessary to take note of some general and basic facts that have a bearing on this study.

### **People and Economy**

The State of Nagaland is situated at the extreme northeast of India. It is bounded by Arunachal Pradesh in the north, Assam in the west, Manipur in the south, and Myanmar in the east. Official publications state that the total area of Nagaland is 16,579 sq. km. According to the Census of India, the population of Nagaland in 1991 was 1,209,546. The number of people belonging to the Scheduled Tribes was 1,060,622. Thus 87.70% of the population of the State was tribal.

Nagaland is largely mountainous in terrain, with several ranges which break into many spurs. The hills take the form of serrated ridges and are separated from one another by deep valleys through which streams and rivers make their way. The two important mountain ranges are Patkai and Barrail. Saramati, the highest peak (3,840 metres) in Nagaland is part of the Patkai range, while Japfu (3,048 metres), the second highest peak is part of the Barrail range. Important rivers that rise in Nagaland are Doyang and Dikhu, which flow into the Brahmaputra, and Tizu, which joins the Chindwin in Myanmar.

Rains are heavy throughout Nagaland. Most of the rainfall occurs during the four months of June to September due to the influence of the southwest monsoons. There are also some rains during

Table 2.1 provides basic data on the demographic aspects of Nagaland. It can be easily seen that there has been a rather high rate of

population growth during the decade 1981-1991. However, the density of population is still relatively low which indicates a sparse population due to the mountainous terrain. Besides, much of the population growth is because of immigration. Literacy rates have been rising steadily during the past decades. What is significant from the demographic point of view is the high percentage of tribal population which makes Nagaland a truly tribal State.

Information given in Table 2.2 shows that the economy of Nagaland depends mainly on agriculture. It is essentially a subsistence economy with shifting cultivation as the principal mode of production. According to Hussain (1988: 119), shifting cultivation covers over 73% of the total arable land in Nagaland.

**Table 2. 1: Basic Demographic Data..**

Year	Total Population	Density (%)	Decadal Growth (%)	Sex Ratio	Literacy (%)	Urban Population (%)	Tribal Population (%)
1961	369,200	NA	14.07	933	17.91	5.19	NA
1971	516,449	32	39.88	871	27.40	9.95	88.61
1981	774,930	47	50.05	867	41.99	15.52	84.00
1991	1,209,546	73	56.08	886	61.65	17.21	87.73

Sources: Statistical Handbooks of Nagaland, 1972, 1990, 1998, Kohima: Government of Nagaland

The land tenure system in Nagaland is governed by customary laws and traditions, and is protected by Article 371A of the Constitution of India. According to Naga customary law, all land, including forests, is privately owned by individuals, clans and villages. Only a small portion of the land is owned by the Government. Such land has been either gifted to the Government by the villages or has been bought by it from the villages. Some portion of the Government land now used for administrative purposes was occupied by the British troops when they first came into the area, and was later handed over to the civil administration (Bordoloi 1998: 60-61). Except for a small area of about 259 sq. km. in Dimapur Mouza, land in Nagaland has not been surveyed, and no land records exist (Ghosh 1986: 184). But every bit of land has



an owner and the Naga dictum is that there is no land without an owner. Though the boundaries are not marked, they are known to the people concerned and are respected by them.

**Table .2.2**

**Economic Classification of the Population of Nagaland (1991)**

Total Population	1209546
Total Main Workers	511497
Workers as % of Population	42.29
Cultivators	371597
As % of Total Workers	72.68
Agricultural labourers	7233
As % of Total Workers	1.40
Household Industry	1991
As % of Total Workers	0.38
Other Workers	130676
As % of Total Workers	25.54

Source: North Eastern Council, Basic Statistics of North Eastern Region 1995, pp 12-14

In order to understand the present situation as it concerns this study, it is necessary to take into account at least three major historical factors that affected the Nagas in modern times. They are: 1) the extension of British rule to the Naga inhabited areas, 2) the emergence of Naga ethnic conflict and the creation of Nagaland as a State in the Indian Union, and 3) introduction and growth of Christianity.

**Naga History: The British Rule**

As already mentioned, there is a vast amount of literature on Nagaland and the Nagas. In addition to many scholars and writers from India and abroad, an increasing number of Naga scholars have begun writing about their own history. Some of the recent works are those of Yonuo Asoso (1974), Sema Piketo (1992), Ao Tajenyuba (1993), Thong Joseph (1997), Changkiri (1999) and Bendanganshi (2000).

It may be said that modern Naga history begins with the conclusion

of the Treaty of Yandabo on 24th February 1826. This treaty ended Burmese influence in North East India and laid the foundation for the development of British power and influence. It provided the basis for the later extension of British rule over the Naga inhabited areas (Sema 1992: 1).

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 1865, they followed a policy of non-intervention. But during the third period, which began in 1866, the British extended their control steadily (Singh 1977: 12).

The first direct contact of the British with the Nagas took place in 1832. The need for safer road communication between Manipur and the Brahmaputra valley, and the problem of raids by the Nagas on British subjects in Cachar and Nowgong districts, attracted the immediate attention of the British towards the Nagas. In January 1832, two British officers, Captain Jenkins and Lieutenant Pemberton, accompanied by a party of 700 soldiers and 800 coolies undertook the survey of a road from Manipur to Assam across the Angami Naga territory. In the meantime, the Angami Nagas regularly raided the border areas of Cachar and Nowgong districts of Assam. These raids attracted the immediate attention of the British officials. In order to check the Naga raids and to protect their possessions, the British began to send punitive expeditions into the Angami Naga territory.

The entry of the British into the Naga inhabited areas and later consolidation of their presence and administration was motivated primarily by their determination to put an end to the Angami Naga raids on British subjects in the lowlands (Sema 1992: 3-21). This is clearly stated by Allen, the writer of the Gazetteer of Assam. He writes:

It should be premised that for the annexation of their territory the Nagas are themselves responsible. The cost of the administration of the District is out of all proportion to the revenue that is obtained. We only occupied the hills after a bitter experience extending over many years, which clearly showed that annexation was the only way of preventing raids on our villages (Allen 1905: 11).

But British and colonial administration did not neglect its basic economic

and commercial interests. It was particularly interested in the discovery of raw material that could be exploited on a commercial basis. Consequently, as early as 1845, Captain John Butler was sent to the Naga Hills to explore the existence of lime, coal, iron ore, indigenous tea plants and any timber trees which were likely to be of commercial value (Sema 1992: 94). In course of time, the colonial administration also encouraged the Nagas in the rudiments of trade and commerce (Sema 1992: 127). It levied house tax in lieu of land revenue, and gradually brought the Nagas into the orbit of a colonial economy.

It is important to note that the first British contact and confrontation was with the Angami Nagas. On their part, the Angamis opposed British incursions into their territory with all the means available to them. In a special way, the dominant Angami villages like Khonoma and Jotsoma put up stiff resistance. The British gradually suppressed Angami resistance through force and finally decided that the best method of controlling the Nagas in general and the Angamis in particular was to establish a strong military and administrative centre in the heart of Angami country. This was the origin of Kohima as the headquarters of the Naga Hills district (Sema 1992: 5-21; Changkiri 1999: 112-153). Given this long resistance to the British on the part of the Angamis, one should not be surprised that the Angamis played an important role during the first phase of the Naga ethnic conflict.

Colonialism brought with it a few byproducts such as road communication, modern education, and some health care (Sema 1992: 93-138). Apart from the road linking Manipur with Assam, the British constructed bridle paths and cart roads as they extended their colonial administration. They allowed the introduction of Christianity and promoted modern education. They considered education a useful tool in strengthening their administration (Sema 1992: 57-92). However, a major consequence of British rule was the political awakening of the Nagas and the emergence of a larger Naga ethnic identity leading to conflict.

### **Naga Ethnic Conflict and the State of Nagaland**

Scholars have pointed out that a Naga village was a distinct political, economic and religious unit (Horam 1992: 60), so that the Nagas lived

in permanently established village-states (Yonuo 1974: x). When the British came in 1832, they found each village isolated from and hostile to its closest neighbour. This was so mainly because of the practice of headhunting and the absence of any trade relations (Horam 1992: 61). In the village states, the traditional chief played an important role, though his position differed from tribe to tribe (Das 1990: 97-101). The isolation of the Naga villages began to break down, and a new educated middle class began to emerge during the British period, leading gradually to the emergence of a common Naga ethnic identity in the form of Naga nationhood. This is the origin of the Naga ethnic conflict.

Most studies dealing with Nagaland devote considerable space to the origin and development of the Naga ethnic conflict. Here it will suffice to take into account only a few important events. It is generally agreed that the origin of the Naga ethnic movement can be traced to the formation of the Naga Club in 1918. The next important events were the formation of the NNC (Naga National Council) in 1946 with a demand for sovereignty or independence apart from India. The NNC formed the FGN (Federal Government of Nagaland) and organised the Naga Army in 1956 and launched an armed struggle for independence. In the ensuing struggle between the Naga Army and the Indian security forces, many lives were lost. In order to bring about an understanding between the NNC and the Government of India, and to end the armed struggle, some Naga leaders formed the All Naga Tribal Conference in 1957, which soon came to be known as the NPC (Naga Peoples Council). Negotiations between the NPC and the Government led to the 16 Point Agreement in 1960 and the creation of the State of Nagaland in 1963.

However, the 16 Point Agreement was not accepted by a significant section of the NNC, which continued the armed struggle. Negotiations between the NNC and the Government of India culminated in the so called Shillong Accord of 1975. But a section of the NNC leaders repudiated the Shillong Accord and formed the NSCN (National Socialist Council of Nagaland) and the GPRN (Government of the People's Republic of Nagaland) in 1980. But in 1988, differences among the leaders led to a split in the NSCN into two factions, namely, NSCN

(I-M) and NSCN (K), the first led by Isaak Swu and Th. Muivah and the latter by S. S. Khaplang. In the meantime, the NNC continued to exist under the Presidentship of Z.A. Phizo living in London. On his death in 1990, his daughter Adino assumed the Presidentship. This was not accepted by a section of the leadership who formed another faction of the NNC with Khadao Yanthan as President. In the meantime, both the factions of the NSCN continued the armed struggle even while they were fighting among themselves. As a result of the efforts made by various leaders, a cease-fire between the NSCN (I-M) and the Government of India was agreed upon. This agreement continues in spite of bitter controversies between the different parties involved. Armed ethnic conflict for nearly fifty years has deeply affected Naga society and continues to affect the daily life of the Nagas in various ways. Newspapers like *Nagaland Post* provide information on different forms of violence taking place everyday in the State.

When Nagaland was formed into a State in 1963 as a sequel to the 16 Point Agreement, special provisions were made to protect traditional Naga life and were incorporated in the Constitution of India under Article 371A. Of particular significance to our study is the clause that unless the Legislative Assembly of Nagaland so decides, no Act of the Indian Parliament will apply to the State of Nagaland in respect of

- i) religious and social practices of the Nagas,
- ii) Naga customary laws and procedures,
- iii) administration of civil and criminal justice involving decisions according to Naga customary law, and
- iv) ownership and transfer of land and its resources.

The Constitutional provisions contained in Article 371A have a direct bearing on forests. As we shall see later, this has prevented the State from acquiring private forests in order to turn them into reserved forests under the ownership of the Government..

The creation of Nagaland State in 1963 also brought about various changes in Naga society. Electoral politics became the norm. This brought in its wake all the features of the Indian political system including nepotism and corruption.

In Nagaland, a peculiar new political culture began to emerge because of the two governments, namely the Government of the State

of Nagaland elected through universal adult franchise and the so called Underground Government, with its factions and divisions coming down from the erstwhile NNC and FGN. This has resulted in a situation of confusion, because of the difficult choice between Naga Independence and Statehood within the Indian Union.

As a State of the Indian Union, Nagaland began to receive grants from the Central Government. Consequently, there has been a general improvement in such areas as infrastructure and education though economic development as a whole has not taken place. Hence the Government is the largest employer, and government service is a coveted form of employment (Ghosh 1982: 182-194). But as Sanyu (1992) has pointed out, Statehood has brought in its wake a situation of confusion, an erosion of traditional values and an uncertainty about the future. After creating the State of Nagaland, India used military might to confront the Nagas and also material inducements in terms of crores of rupees to divert their attention (Sanyu 1992: 200). This has resulted in a weakening of the power of the traditional authority structures, easy money and widespread corruption, and a host of other undesirable trends that afflict Naga society today. As we shall see later, some of them have a bearing on forest management.

### **Christianity in Nagaland**

The introduction of Christianity has been a very important factor of social change among the Nagas. Some scholars like Terhuja (1972: 294) consider Christianity the most important factor of change. According to Sema it was the missionary, and not the administrator, who was the main harbinger of change in the beliefs and ways of life of the Nagas (Sema 1992: 85).

Though the first Naga became a Christian in 1847, it was only in 1872 that Edward Clark, the first missionary entered the Naga country (Downs 1992: 82). But the growth of Christianity was slow for a long time, and the large scale spread of Christianity among the Nagas took place only in the 20th century (Philip 1976: 194-199; Downs 1983: 133-134; Lots-ro 2000: 44-51). In fact, rapid growth in the number of Christians took place after 1951. This can be seen also from the data from the Census of India as given in Table 2.3.

**Table 2.3.**  
**Growth of Christianity in Nagaland from 1951 to 1991**

	1951	1961	1971	1981	1991
Persons	98,068	195,588	344,798	621,590	1,057,940
Percent of Population	46.05	52.98	66.76	80.21	87.47

Source: Census Reports

The first Naga tribe to embrace Christianity in large numbers was the Ao tribe, followed by Sema and Lotha tribes (Downs 1983: 133). The Angamis were rather slow in accepting Christianity (Downs 1983: 135-136; Terhuja 1972). In fact, even now many Angamis follow the traditional religion. In recent times, some followers of their traditional religion have begun to describe themselves as Hindus.

Two aspects of Christianity in Nagaland must be taken into account. The first is the presence of different denominations. While Baptists are the dominant denominational group, Roman Catholics too are significant in numbers (Syiemleh 1990). The second aspect is that Christianity in Nagaland spread mainly due to local leadership. Though the first missionaries were foreigners, later missionary work, especially among the Baptists, was done by the Nagas themselves (Philip 1976: 206; Downs 1983: 168). Missionary work among the Roman Catholics has been done mainly by Indians coming from the southern States of Kerala, Tamil Nadu and Karnataka.

Downs, a historian of Christianity in North East India, finds a correlation between mass conversion movements and traumatic experiences of the people in the form of natural calamities and political instability (Downs 1992: 138-146). A similar view is expressed also by Chaube (1973: 42). It is also said that the tribals of the North East, including the Nagas, accepted Christianity because they felt that Christianity would help them preserve their identity (Karotemprel 1996: 20-24). There is also the view that the acceptance of Christianity signals the quest of a new integrated form of society which will overcome the deep split introduced into their lives by colonialism and imperialism (Sinha, 1994: 86).

Whatever be the reason for the acceptance of Christianity, the fact

is that it initiated radical changes in the world view of the Nagas and deeply affected their social institution and culture. Two general positions are expressed by interested outsiders with reference to the effect of Christianity in Nagaland.

First, there is the position that the indigenous culture has been undermined radically. This is destructive of social equilibrium, and leads to chaos, anarchy, alienation and anxiety. Second, there is the position that the introduction and establishment of Christianity in Nagaland isolates that area from India, making it a political time bomb. These two positions are not identical but neither are they mutually exclusive (Pruett 1974: 56).

Naga intellectuals agree that there has been a certain amount of acculturation, but insist that Naga Christianity is typically Naga in character. They also refute the view that Christianity is responsible for the so called insurgency and ask whether Christianity is also responsible for the ethnic conflict found in Manipur and Assam.

In any case, there is no doubt that Christianity has initiated a process of change that has affected the traditional Naga beliefs about nature and environment. According to some scholars,

Their fatalistic attitude toward life has turned to be a life of faith and hope. Nagas fear of spirits vanished and their superstitions were diminished. The blood sacrifices offered to propitiate gods and spirits have less significance. Christianity transformed the individual, social, cultural, religious and even political life of the Nagas (Philip 1976: 202-203).

While accepting this view, it must also be kept in mind that conversion to Christianity has not completely stamped out former animistic beliefs. As Pohsngap points out many people believe that diseases are caused by evil spirits and many people go for traditional methods of spirit exorcism (Pohsngap 1996: 53). In any case, it is certain that Christianity has affected beliefs regarding nature and environment and that this change has a bearing on our study of the traditional forms of forest management.



## **Nagaland and Its Forests**

As this study deals with traditional systems of forest management in Nagaland, it is necessary to begin with an examination of the nature and quality of forests found in Nagaland.

### **Nature of Forests in Nagaland**

Nagaland is rich in vegetation because of fairly good soils, heavy rainfall and varying altitudes and climatic conditions, ranging from the Alpine in the higher reaches of the mountains to moist, hot tropical conditions in the foot hills. Botanically it is one of the richest spots in the world with varied and unique species (Thepfulhouvi 1990: 2). The world's tallest Rhododendron tree, measuring 30.79 metres in height and 2.41 metres in girth, has been found on Japfu mountain. It has been entered in the Guinness Book of Records (Nagaland 1998: 26).

Botanists and foresters have classified the forests of Nagaland into three major types: (1) tropical, (2) temperate, and (3) alpine (Rao 1996: 55-58). Early reports such as that of Godwin-Austen who conducted a survey in 1872 say that there was dense forest cover all over Nagaland with rich and varied flora and fauna (Elwin 1969: 11). The Kohima District Gazetteer mentions that even in 1970 there were virgin forests in Zeliangrong and Chakhesang areas (Gazetteer 1970: 107). But "the virgin forests are now confined to mainly to the uninhabited and inaccessible high mountainous regions" (Saleh 1989: 29).

Reliable information on the exact extent of forest area in Nagaland in the past is not available. Information given in Table 3.1 shows that on 31 st March 1998, forests covered 862,930 hectares out of the total land of 1,657,583 hectares or 52.05 % of the area of Nagaland. This is the legally notified area of forests, and the forest cover may be actually more. In fact, in 1984-85, the legally notified area was 863 thousand hectares (52.2% of the area), while the actual area, calculated on the basis of imagery was 1, 436 thousand hectares or 86.9% of the total area of Nagaland (NEC 1995: 30).

Table 3.1 also shows that 477,827 hectares or 55.4 % are virgin forest, and 284,280 hectares or 32.9% are degraded. Information given in Table 3.2 shows that the quality of forests in terms of density has deteriorated rapidly between 1972 and 1989. It is almost certain that the quality of forests has deteriorated further during the 1990s due to extensive exploitation.

**Table 3.1. Forest Area in Nagaland as on 31-3-1998 in Hectares**

Legal Status:	Forest Area	% of Total Forest Area
Reserved forests	8583	1.0
Purchased forests	29247	2.3
Protected forests	50756	5.9
Wildlife Sanctuary	22237	2.6
Village forests		
Virgin	477827	55.4
Degraded	284280	32.9
TOTAL	862930	100.0
Ownership:		
State	100823	11.7
Private	762107	88.3

Source: Nagaland 1998: 24.

In Nagaland, the ownership of land, including forests, is determined by traditional law, which is protected by Article 371A of the Constitution of India. According to traditional law, there is no land without an owner. But ownership of land, and therefore also of forests, is private and is vested with individuals, clans, khels and the village as a whole. There is no concept of the Government being the ultimate owner of the land and the forest. In fact, if the Government needs land, it must acquire it through purchase from the private owner. All ownership rights are clearly recognised and protected by customary law. In Sections 28 to 30, the Nagaland Forest Act of 1968 recognises village forests and makes a provision for the framing of rules for the protection and improvement of such forests (Dewan 1999: 335). At the same time, the Nagaland Village and Area Council Act of 1978 entrusts the management of village forests to the village council

(Nagaland Code 1986: 63). As many as 7,62,107 hectares or 88.3% were privately owned and only 1,00,823 hectares or 11.7 % were under Government control, 19,247 hectares of it were purchased by the Government from private owners.

**Table 3.2. Changes in Types of Forest Cover in Nagaland (In Sq. Kms.)**

Type of forest	1972-75	1980-82	1987-89
<b>Dense Primary Forest</b>			
Cover (40 % density)	7,067	4,921	4,632
<b>Open Forest</b>			
Cover (10 to 35% density)	1,087	3,174	9,724

Source: Forest Survey Report 1989, quoted by Pandey 1996:103

### Methods of Forest Exploitation

Kiyasetuo (1995: 65-66) identifies the following as the chief methods of the exploitation of forests in Nagaland: *Jhuming*, extraction of firewood and raw materials, manufacture of charcoal, burning of forests, and logging.

*Jhuming* or shifting cultivation is the principal method of agriculture among the Nagas. It consists in clearing a plot of forest land, burning the vegetation, and cultivating the plot for two or three years, and then shifting the process to a new plot of forest land. In the meantime, the old plot that was cultivated is left fallow so that vegetation can grow again. After a lapse of some years, the original plot is cultivated again.

*Jhuming* covers over 73% of the total arable land in Nagaland, (Hussain 1988: 119) According to the Task Force on Shifting Cultivation of the Ministry of Agriculture, in 1983 there was an average of 190 sq kms of land under shifting cultivation in Nagaland with 116,046 families practising it. A minimum of 1,913 sq. kms. was under shifting cultivation at one time or the other (NEC 1995: 30). Thus about 11.5 % of the total area of Nagaland is under shifting cultivation.

It is said that *jhuming* seriously affects the forests because it destroys vegetation and damages the resilience characteristic of the ecosystem. This happens in two ways: shortening of the *jhum* cycle, and the extension of *jhuming*. The *jhum* cycle is the period or number of years

in which *jhum* land is allowed to lie fallow after two or three years of cultivation before that particular plot is cultivated again. Studies have shown that it is an environmentally healthy practice when an 18-20 year cycle is maintained (Gangawar and Ramkrishnan 1992: 101). But in Nagaland, the *jhum* cycle has been becoming shorter over the years due to pressure on land and the carrying capacity of the soil. According to Hussain (1988: 117) the *jhum* cycle in some parts of Nagaland is as short as 5 to 6 years, which is not sufficient for the regeneration of forests. This naturally leads to the extension of *jhuming*. Field studies have shown that in most villages, where *jhuming* is the principal or only mode of production, the frontiers of *jhum* land have been pushed to the limits (Hussain 1988: 181).

There is no information available on the amount of firewood consumed by the people. But in Naga villages a considerable amount of firewood is used for cooking and heating. In a traditional Naga house, a fire is kept burning all the time, particularly in winter, in order to keep the house warm. In certain parts of Nagaland, particularly in the Southern Angami area, large stacks of firewood are found near every house. Some of the stacks may contain firewood that is a decade old, because older firewood is an indicator of economic prosperity and social status. But firewood is extracted not only for local domestic use but also for sale in the towns. Kiyasetuo (1995: 66) says that everyday several truckloads of firewood are brought to Kohima for sale.

Traditional Naga houses are built with timber and thatching grass, though now concrete or brick walls are occasionally used for walls and tin sheets for the roof in the urban areas. As the vast majority of the people, about 83 % according to the Census of 1991, live in villages, there is considerable extraction of firewood and timber for domestic use for house construction and furniture.

Some amount of forest produce, such as bamboo and wood, has been extracted to serve as raw material for local forest based industries. But such exploitation of forests is not as serious as logging which is done by the commercial forces.

A very large number of trees are felled, sometimes completely clearing a patch of the forest, every year to make charcoal to be sold in the towns. This charcoal reaches every family and office for heating

the rooms during the cold winter. For some villagers, the sale of charcoal is the only source of cash, which they need to buy various items of daily consumption.

Wild fires or burning of forests usually takes place in spring when it is dusty and windy. Sometimes these fires are started by the people for no specific reason. But usually the fires are started to facilitate hunting and trapping wild life. In order to curb cases of wild fires being started, fines are imposed on the culprits by the administration or the village council.

During the 1990s logging was a big business for making quick money among the Nagas till the Supreme Court of India imposed a ban on the extraction of timber. When logging was at its height, every day on an average about 50 truckloads of logs were transported to Dimapur via Kohima alone. They were taken down to Dimapur for sale and export to other states. No other method of forest exploitation has been as destructive as logging because in some parts of Nagaland most of the centuries old trees were felled systematically. It may not be an exaggeration to say that this type of logging has destroyed nearly all the virgin forests of Nagaland within a short span of time. As Kiyasetuo (1995: 66) points out the main motive behind logging was the desire to make quick money. This has been due to changes in the economy particularly after the creation of the State of Nagaland in 1963. It has been said that due to the shift in economy, timber has become a lucrative industry. There is a temptation for every young man to make quick money in this line which has led to the destruction of irreplaceable tracts of forest land, which is even leading to a major ecological imbalance (Sanyu 1992:272).

If the desire for quick money is the motive for many to sell timber, the other side of the picture is that forests have been cleared systematically for industrial use also in other parts of the country. Even in the Northeast clear felling of forests has been widespread and the forest cover has decreased in all the States, except in Nagaland (NEC 1995: 32). It is likely that in their short sightedness, the people of Nagaland do not realise the consequences of such clear felling, well explained by scholars like Gadgil (1989). They do not realise too that they are being used by outsiders who view forests only as a source of

profit and have no understanding of the role they play in the life of the Nagas.

## **Government Policy and Programmes**

Any Government programme must be based on a definite policy. Even after Independence, the forest policy in India, that was inherited from the British, considered the forests Government property, and treated them as a source of revenue and raw material for industry. Though the private ownership of forests was accepted in Nagaland, the policy of treating forests as sources of revenue and raw material was followed also in the State till the formulation of the National Forest Policy of 1988.

It is necessary to note that the National Forest Policy has undergone changes over the years. Similarly, also the policy of the Government of Nagaland has changed. An important aspect of this change is that the Village Council has been empowered to look after the forests. At present the Government of Nagaland has a fairly well articulated forest policy which is said to be in consonance with the National Forest policy. Official publications of the Government of Nagaland state this policy as follows:

National Forest Policy stipulated that at least one third of the geographical area should be under forest cover. It further says that in the hills at least 60% of the area should be under forest cover to prevent soil erosion and degradation of land and to maintain the stability of the fragile ecosystem. In consonance with these objectives, the State's policy has been designed to:-

1. Convert *jhum* land areas into economically and ecologically sustainable woodlands.
2. Regulate harvesting of forest resources on principles of sustainability
3. Protect and conserve endangered species of fauna and flora
4. Raise and develop local species rather than exotic ones.
5. Protect, conserve and manage bio-diversity in Reserve Forests and Wild Life Sanctuaries based on sound principles of in-situ conservation (Nagaland 1998: 25)

This policy statement was incorporated into the Governor's Address to the Budget Session of the Nagaland Legislative Assembly delivered on 16 March 1999 (Sharma 1999: 8-9). It is interesting to note that *jhuming* is noted in other contexts in the same speech. But its link with Naga culture and economy is not discussed clearly. So alternatives to staple food, much of which comes from *jhuming*, are not spelt out. Dealing with the activities of the Soil and Water Conservation Department in the Ministry of Agriculture, the Governor says:

Soil and water are natural resources vital for human subsistence. In our State, unfortunately, there is soil loss of over 70% causing degradation of land. The cause of this is attributed to the practice of shifting cultivation and improper use of land. In order to tackle this problem, proper land use planning and water conservation techniques, such as Bunding, Farm Forestry, Afforestation, Cash Crop and Orchard Plantations and Stream Bank Erosion Control need to be adopted. These technologies are being applied in Watershed Catchment Areas and in selected problematic areas (Sharma 1999: 6).

The Governor's Address alludes to similar activities of the Department of Wastelands Development under the Ministry of Agriculture. These activities are explained in detail in the following words:

The Department solely aims at regeneration by intervention in the degraded *jhum* land by plantation programmes on watershed basis, conservation of soil and moisture, thus maintaining the ecological balance and protecting environment through the participation of the rural population so as to improve the socio-economic condition of the people in the watershed areas on a sustainable basis (Nagaland 1998: 126).

It can be seen from the above policy statement that promoting a method of exploitation along with conservation on *jhum* lands has been a major concern. This indicates a gradual shift in policies, from encouraging people to give up *jhuming* in favour of settled cultivation, a policy that was initiated by the British (Sema 1992: 98-100). However, even conservation of *jhum* fields is not a simple matter because of the close relationship between *jhuming* and Naga society

and culture.

In Nagaland, *jhuming* is a way of life evolved as a reflex to the physiological character of land under the sub-tropical ecosystems of monsoon climate. It is practised for livelihood. The climate, the terrain, their food habits, their needs, their self-reliance, their folklore, festivals and overall cultural ethos have a say in shifting cultivation. In other words, the whole gamut of Naga society is interwoven with the means of food production (Hussain 1.988: 1.81-2).

Considering this fundamental nature of *jhuming*, it is not possible to eliminate it altogether. What is required is the use of intensive cultivation, multiple cropping and other practices that increase productivity. At the same time it is possible to promote the cultivation of trees in the *jhum* fields as the propaganda campaign launched by the Directorate of Wastelands Development of the Government of Nagaland suggests. Of particular significance is the cultivation of the Alder tree which can also provide firewood and lead to the enrichment of the soil. In every effort the role of *jhuming* plays in their life has to be understood. It will then be possible to upgrade and modernise it and find sustainable alternatives to it.

A major effort made by the Government of Nagaland is the Nagaland Environment Protection and Economic Development Project (NEPED). This is a five year project launched in 1995, jointly funded by the Governments of India and Canada. This project covers 1,000 villages in the different districts of Nagaland. As the brochure on the project explains, it envisages the introduction of innovative agro-forest practices with people's participation. The project hopes that such new practices will contribute to: 1) conservation of the natural forest land from being encroached upon by *jhum* cultivation; and 2) transform, through demonstration, a major portion of the land, currently under *jhum* into land in which agro-forestry techniques will be applied. Thus the aim of NEPED is to make shifting cultivation practices more productive and profitable. As information on the implementation of the project is scanty, it is not possible to say at this stage what the final outcome will be.

The most recent effort on the part of the Government of Nagaland is the declaration of 1999 as the Year of Tree Planting, with the objective



of making realistic efforts at afforestation. Under this Programme, the Department of Forests, Ecology, Environment and Wildlife distributed about forty-five lakh stumps or seedlings: 22,28,572 teak stumps, 17,00,000 gamari stumps and 6,00,000 seedlings in poly bags (*The Warrior* 2000: 9). But there is a danger that exotic species in poly bags will be introduced in the guise of afforestation. There are already some indications that exotic varieties of pines and eucalyptus trees have been introduced. There are also instances of monoculture of these trees. These can hardly be called sustainable alternatives based on their culture.

It may be relevant to mention here that there are, in Nagaland, laws and rules dealing with different aspects of forests and their exploitation. There is, first of all, *the Nagaland Forest Act of 1968*. Then there are various rules dealing with the extraction and transport of forest produce like timber, protection of forests from fire, etc. (Dewan 1999: 324- 405). They are: 1) Rules to regulate the export of forest produce, 1969; 2) Rules for the preservation of wildlife in reserved forests, 1969; 3) Rules for the protection of forests from fire, 1969; 4) Rules to regulate the transport of Forest produce by land, air and water within and outside Nagaland, 1969; 5) Rules to regulate the salvage, collection and disposal of drift and other timber, 1969; 6) Rules to regulate the removal of orchids from the forests in Nagaland; 7) Rules for the quarrying of stones or the collection of stones, gravel, shingle or sand from all forests in Nagaland, 1969; 8) Nagaland settlement of forest coupes and mahals by tender system rules, 1969; and, 9) Nagaland settlement of forest coupes and mahals by auction and sale system rules.

Thus there is no dearth of rules. But such laws and rules are of little significance because of the peculiar situation in Nagaland where most of the forests are privately owned, and come under the purview of the village councils. Besides, it is difficult to say to what extent these rules are observed on account of the prevailing culture of easy money and widespread corruption.

After the Supreme Court Order of 1996, banning the extraction of timber, there have been two significant developments. The first is the system of Joint Forest Management (JFM) and the other is the shift to

Non-Timber Forest Produce (NTFP). As most of the forest in Nagaland is owned privately, JFM has been implemented rather easily, and new afforestation schemes have been taken up under JFM. However, there is a possibility that JFM is used to circumvent the Supreme Court Order. With the direct extraction of timber being not possible, there has been some effort to extract NTFP like cane, bamboo and various species of medicinal plants. There is a great untapped potential for NTFP in Nagaland, but the danger is that their extraction may be controlled by contractors who have no concern for their sustainability.

Another aspect of the problem of forest conservation in Nagaland can be expressed as follows. Though Nagaland has a fairly clear forest policy, at least two Ministries of the Government of Nagaland are involved, namely, the Ministry of Agriculture and the Ministry of Forests. It is difficult to say whether both of them share the same views, and work in harmony with each other's programmes. Besides, the policy statement says that people will be involved and people's participation sought in implementing the policy. Will people's traditional wisdom also be sought and will the traditional institutions be employed in implementing this policy? For forest use to be sustainable the policy makers need to answer that question.

## The Angamis and their Forests

The name *Angami*, like most names of tribes in Northeast India, was given to them by their neighbouring tribes or people. "Their original name is *Tengima*. The word *Angami* is a distortion of the Manipuri word *Gnamei*. Angamis were called *Tsungumi* by the Sema, *Tsungung* by the Lotha, and *Mour* by the Aos" (Das 1994: 63). In any case, the name *Angami* has been in use for a long time, and now the Angamis too use it to describe themselves.

The traditional habitat of the Angamis corresponds more or less with the central and southern parts of the present Kohima district (See Map 3). The entire area is mountainous, with eminent peaks and elevated ridges, irregular spurs and deep valleys. "Summits of the lofty peaks are thickly wooded, clad with evergreen vegetation; they abound in varied flora and fauna. The lower hills have become deforested owing to the practice of both slash and burn and terrace system of cultivation" (Gazetteer 1970: 2).

Hutton (1921: 15) identifies four distinct groups among the Angamis. They are the Konomo group, Kohima group, Viswema group and the Chakroma group. At present, it is common to identify three groups chiefly on the basis of their geographic distribution. Those living in Kohima and the villages surrounding it, are the Northern Angamis, those living to its west are the Western Angamis, and those to its south are the Southern Angamis.

### The Southern Angamis

Southern Angamis are known as *Zuonuo-Keyhnuo* (Das 1987: 128). Sanyu (1996: 28) says that they are the descendants of two brothers named *Zuonuo* and *Keyhnuo*. In the process of migration and expansion, they formed ten villages. These villages are Kigwema, Viswema, Jakhama, Khuzama, Kedima, Kezoma, Phesama, Pfuchama, Mima and Mitelephe. Later, Kezobasa, the eleventh village, emerged from Kezoma.

The area inhabited by the *Zuonuo-Keyhnuo* or the Southern Angamis is a compact region, with clearly identifiable natural boundaries on all sides. Kohima village and Kohima town lie to the north. In the west, the Southern Angami area is bounded by the lofty Japfu range of mountains. Some of the eminent peaks in this range are Japfu (3,894 metres above sea level), Ezupu (3,056 metres), Khuno (2,887 metres) and Traharo or Terhazu (2,613 metres). To the south of the Southern Angami area lies the territory of the Mao tribe. Zulu river, called Doyang as it leaves the Angami area, and which rises near Mao, marks the eastern boundary. From west to east, the area slopes from the watershed of the Japfu range towards the Khwiru river, to rise again to the Kedima range, and then again slopes—rather steeply to the Dzulu river. At the western edge, the area consists of the steep slopes of the Japfu range, but the slopes become gentler as they near the Dzulu. There are several spurs of the Japfu range jutting out towards the east, with mountain torrents and streams rushing in between them to form the Khwiru, which collects all the waters draining from the Japfu range, and which, in its turn, joins the Dzulu near Chakabama. As rainfall is heavy, these streams never become fully dry. Describing this area, Godwin-Austen (quoted in Elwin 1969:578-588) wrote in 1872:

No part of the Barrail is more beautiful than that between Kigwema and Sopvomah, looking up the lateral glacial gorges with their frowning, steep sides, running up to the crest of the Barrail, which is for the greater part a wall of grey rock and precipice. Dense forest covers the slopes, but from their steepness many are bare, breaking the usual monotony of the dark-coloured mountain scenery. Where the steep rise in the slope commences, the spurs are at once more level, and are terraced for rice cultivation; not a square yard of available land has been left, and the system of irrigation canals is well laid out. I have never, even in the better-cultivated parts of the Himalayas, seen terrace cultivation carried to such perfection, and it gives a peculiarly civilised appearance to the country.

National Highway 39, passing through Kohima and going towards Imphal in Manipur, cuts across the higher slopes of the Japfu range and traverses the entire Southern Angami area roughly in a north-south direction. It links the more important villages of Phesama, Kigwema,

Jakhama, Viswema and Khuzama. It also provides an access to the other villages situated in the interior. In fact, all weather motorable roads link the interior villages to the National Highway. A road from Mao traversing along the ridge of the Kedima-Kezo-Chazou range, links Kedima, Kezoma and Kezobasa to Chakabama (see Map 3).

**Table 4.1. The Villages of Southern Angami Area (1991)**

Village	Area in Hectares	House-holds	Total Population	Males	Females
Kedima	1230.00	380	2618	1273	1345
Kezocha	850.00	43	272	137	135
Kezoma	690.00	199	1437	720	717
Kezo Town	110.00	108	524	266	258
Kezo Basa	280.00	42	218	101	117
Mitelephe	1800.00	35	120	59	61
Chakhabama	420.00	99	599	301	298
Khuzama	3100.00	395	2116	1071	1045
Viswema	4600.00	829	5466	2683	2783
Sweba (Ur)	4100.00	54	215	122	93
Jakhama	4500.00	803	4576	2436	2140
Jakhama Town	4300.00	211	1035	634	401
Kigwe Town	1700.00	97	402	198	204
Kigwe Basa	3700.00	8	24	14	10
Kigwema	1800.00	617	3346	1665	1681
Mima	1900.00	238	1716	848	868
Phesama	3700.00	335	1884	930	954
Phuchama	1600.00	103	701	368	333
<b>Total</b>	<b>40380.00</b>	<b>4596</b>	<b>27269</b>	<b>13826</b>	<b>13443</b>

Source: Census of India 1991.

There are now 11 villages with their off-shoots in the Southern Angami area. They are situated on the spurs of the main Japfu range and the Kedima-Kezo-Chazou range which is lower than the Japfu range. The villages on the spurs of the Japfu range, from north to south, are Phesama, Pfuchama, Kigwema, Mima, Mitelephe, Jakhama, Viswema and Khuzama. Villages on the Kedima range are, Kezobasa,

Kezoma and Kedima. Some of the older villages are very large both in area and population. As there has been no systematic survey, information on their geographical area is based on estimates accepted by the Census of India. Information on their demographic aspects is taken from the Census of India for the year 1991. Details are given in Table 4.1. Some of these villages have off-shoots, which are not recognised as autonomous, though they are treated as distinct human settlements by the Census of India. Every village has its own myth or legend of origin, always indicating that the original settlers came from some other village or area. Some of the original villages are definitely old, perhaps more than a thousand years. All the off-shoots are of recent origin, as people from the older villages moved closer to their fields or towards the National Highway and set up independent households.

Information on the occupational structure of the population is found in Table 4.2. Cultivation or agriculture is the main occupation of a majority of the people. An increasing number is employed in the service sector. However, the Government is the chief employer and most of those employed in the service sector describe themselves as Government servants. Government employment is an important source of income in cash not only for the individual but also for the household and the village itself. Such income makes it possible for a household to acquire consumer goods, to travel and even to send the children to private schools. Most of the construction workers are from outside, chiefly from Jharkhand. However, trade and commerce, mostly in the form of petty shops is in the hands of the locals. Similarly, transport provides employment to a small number of locals. But there is no development of the secondary sector which needs large investments.

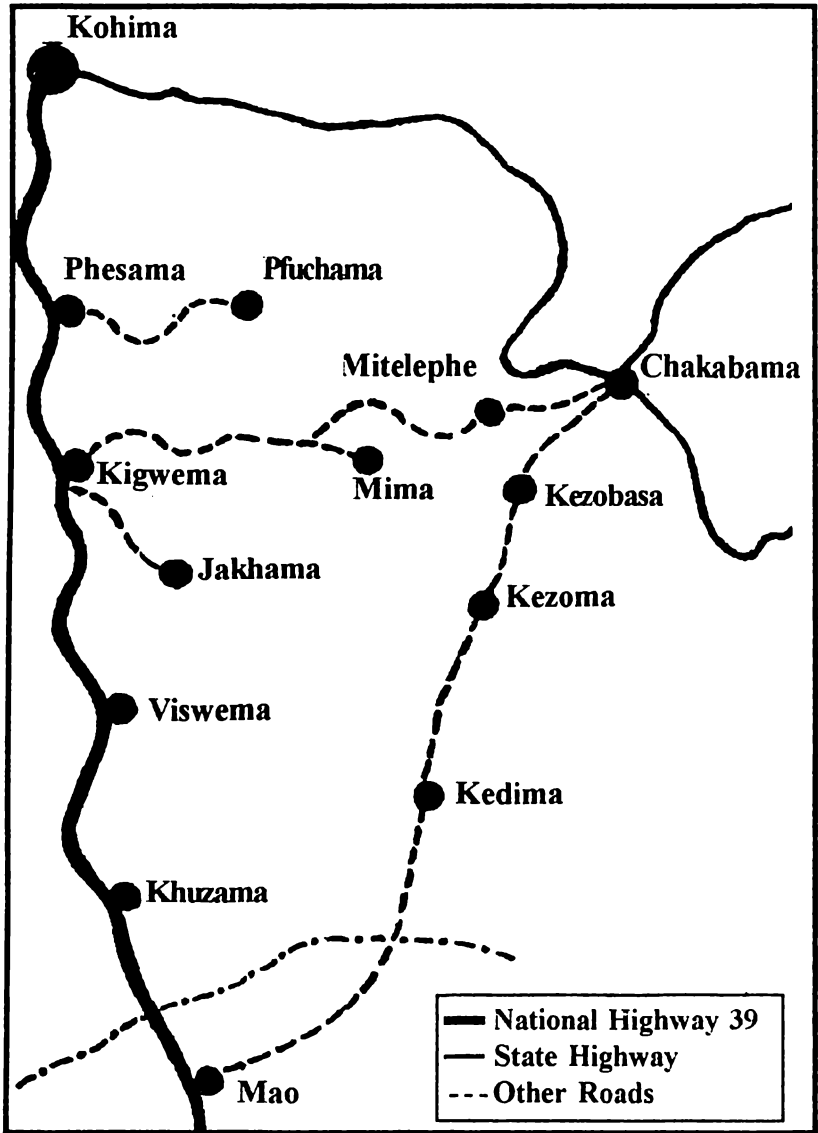
The local economy has undergone a rapid change in recent times due to the establishment of the Zakhama Military Station, and the institutions of higher education, namely, St Joseph's College in Jakhama and Japfu Christian College in Kigwema. These colleges attract a large number of students from outside who need accommodation, which they find in the many hostels run by the local people.

**Table 4.2 Occupational Structure of the Population in Southern Angami (1991)**

Village	Total Main Workers		Cultivators		Livestock		Mining Quarrying Manufacturing		Construction		Trade & Commerce		Transport Communication		Other Service	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Kedima	506	616	448	606	4	—	—	—	1	—	5	—	2	1	45	9
Kezocha	51	42	11	34	—	—	—	—	—	—	—	—	1	—	39	8
Kezoma	336	379	306	376	—	—	—	—	2	—	—	—	—	—	28	3
Kezoto	125	123	122	122	—	—	—	—	—	—	—	—	—	—	3	1
Kezo Bas	55	52	51	52	—	—	—	—	1	—	—	—	—	—	3	—
Miteleph	36	33	30	32	2	—	1	—	—	—	1	—	—	—	2	1
Chakaba	154	116	127	112	1	—	—	—	—	—	1	—	—	—	25	4
Khuzama	456	480	248	408	12	—	—	—	14	5	5	—	14	—	163	67
Viswema	1183	1165	716	1016	19	1	2	—	36	6	15	1	27	3	368	138
Sweba	63	55	19	35	—	—	10	5	—	—	6	—	—	—	28	15
Jakhama	1137	747	468	652	23	3	—	5	44	6	11	2	40	8	551	71
Jakhama Tn	378	152	100	103	21	—	2	—	5	1	11	7	13	—	226	41
Kingwe Town	97	89	63	78	—	—	6	—	1	—	—	2	6	1	21	8
Kigwe Basa	11	7	10	7	—	—	—	—	—	—	—	—	—	—	1	—
Kigwema	727	748	412	689	1	—	—	—	8	1	7	2	5	—	294	56
Mima	416	447	319	429	1	—	—	—	11	—	—	—	2	—	83	18
Phesama	453	476	265	415	14	—	4	—	17	3	1	—	—	—	152	58
Pfuchama	170	180	99	168	—	—	—	—	—	—	—	—	—	—	71	12

Source: Census of India

**Map 3. Southern Angami Area**





In spite of the infusion of cash from outside, people have not given up cultivation because it is a matter of pride that they eat the rice that they produce in their own fields. It may be worth noting that the Angamis do not sell the rice they produce. In their opinion selling rice would affect their culture seriously. Some of the persons employed in Government service stay in Kohima, and they may ask their clansmen to cultivate their fields under informal tenancy conditions.

### **Land Use and Forest Cover**

As there have been no systematic land surveys, information on the exact area of Southern Angami is a matter of intelligent guess work. According to the estimates given in the Reports of the Census of 1991, the total area of Southern Angami is about 40,000 hectares or 400 square kilometres (see Table 4.1). It is likely that the area is larger, because the higher reaches of the mountain range are apparently excluded from these estimates. Table 4.3 provides information on land use in the Southern Angami villages as recorded in the Census of 1981. They are also estimates because there are no survey records and exact measurements of land. Hence the information given in Table 4.3 should be taken as indicative rather than definitive.

Traditional boundaries like small streams or watersheds of ridges divide the villages. It is rare that a large stream is taken as a boundary because, after land, water is the most precious resource and no village would like to share it with another village. As recently as the early 1970s Viswema and Jakhama, two friendly villages tracing their origin to two brothers, were involved in a major dispute over the waters of a stream.

A typical Southern Angami village has a well defined residential site, usually located on the saddle or ridge of a mountain spur. Such a site was obviously chosen for defensive reasons as in the past inter-village feuds could arise at the least provocation. Given the nature of the residential site, no visitor or stranger can approach the village undetected even when he or she is at some distance. The residential site is surrounded by some small tracts of forests, bamboo groves and small patches of kitchen gardens. Next to them are the terrace fields. On the higher slopes, where it is not possible to construct irrigation

channels, are the *jhum* fields. Then come the forests.

Terrace fields are prized property. Today a person may use a *jhum* field for building a house or even be prepared to sell it, but he will never use a terrace field for any purpose other than to cultivate. All types of land are valuable, but terrace fields are the most valuable and the social status of a person is directly related to the number and area of terrace fields he owns. All other types of land are also valuable, and the value of land increases greatly if it is slightly level. But even steep mountain slopes are valuable because of their vegetation. Even a small bit of land near the fields is cultivated, and in some places there are terrace fields barely one square metre in area.

**Table 4.3: Land Use in the Southern Angami Villages (1981)**  
(Area in Hectares)

	Wet Cultivation Irrigated	Dry Cultivation Unirrigated	Jhum Cultivation	Forest Area
JakhamaHQ	4.05	12.14	16.19	10.12
Jakhama	80.94	161.87	607.03	809.37
Viswerna	101.17	202.34	809.37	1011.72
Khuzama	4.05	60.70	80.94	121.41
Kedirna	40.47	121.41	121.41	202.34
.Kezorna	24.28	80.94	202.34	161.87
ChakabamaHQ	2.02	12.14	20.23	4.05
Chakabama	7.28	60.70	80.94	2.02
Pfuchama	80.94	40.47	323.75	202.34
Phesama	40.47	202.34	1618.74	809.37
Kigwerna	80.94	242.80	1011.72	809.37
Mirna	10.12	80.94	202.34	202.34
Mitelephe	4.05	24.28	80.94	2.02
<b>Total</b>	<b>480.78</b>	<b>1303.07</b>	<b>5175.94</b>	<b>4348.34</b>

Source: District Census Handbook, 1991

According to Table 4.3, irrigated wet cultivation is carried out on about 480 hectares.. These are the terrace fields with an assured supply of water from the mountain streams. Unirrigated dry cultivation is carried out on about 1,300 hectares. Some of these fields are levelled

and terraced, but most are not levelled and are used for cultivating vegetables and potatoes. All these fields depend on rain water or temporary springs that are active during the monsoons. *Jhum* fields cover about 5,175 hectares. Forests cover only 4,348 hectares. But local knowledgeable persons say that these forests do not include the summits and higher slopes of the Japfu range. These are virgin forests, if that term can be used because no part of the forest is considered inaccessible.

In the Southern Angami area *jhum* fields have a fairly long fallow period. In fact, in villages like Jakhama and Kigwema, they were left fallow for as many as twenty years because people did not need to cultivate them. This longer *jhum* continues even at present mainly because *jhuming* occupies a marginal place in the Angami agricultural economy. As we shall see later, Alder trees are grown in the *jhum* fields. Therefore all the *jhum* fields with extensive cultivation of Alder trees can be classified as forest area. This gives a fairly high proportion of forest cover. Thus *jhum* has not become destructive of forests in the Angami area though it might have resulted in it among some other Naga tribes. To understand it, we shall discuss their forest conservation systems in the next chapter.

## Conservation of Forests

As noted already in several places, the Angami country in general and the Southern Angami area in particular, has well preserved forests. Control over forests in the form of ownership is the basic factor in promoting the preservation of forests. It is generally accepted that ownership and control of land and its resources is fundamental to the identity and survival of tribal societies, As Verrier Elwin has noted where tribal communities have declined, the first cause of their depression was the loss of their lands and forests (Elwin 1988: 62). It can be, therefore assumed that ownership and control over their forests is the basic factor in the conservation of forests by the Angamis.

### Ownership of Forests

As in other parts of Nagaland, so also in the Angami area, ownership of land and forests is regulated by customary law. As noted earlier, ownership is private. But the pattern of ownership is complex and has come into existence through various developments. According to legends, every Angami village has two original ancestors. When they established a village, they used as much land and forests as they needed for cultivation and survival. Thus through actual use, a division of land and forests came into existence. When the offspring of the original ancestors began to increase, the division of land and forest continued, giving rise to the pattern of ownership by individuals, clans, *khels* and the village community. At present terrace fields and the greater part of *jhum* lands are owned by individuals. Similarly a certain area of forest is owned also by individuals. But there is also a considerable amount of *jhum* land and forest owned by the clans, and a certain amount by the village as a whole. While individual ownership of terrace fields is treated as absolute, ownership of *jhum* fields and forests is usually not absolute because under certain circumstances others have access to such fields and land.

It can be seen that the original acquisition of ownership rights over

a plot of land was through actual cultivation or use or need. 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. These general conditions were applicable to forests as well, and even to individual trees. At times ownership of a tree growing in another's land could also be claimed because the individual staking such a claim needed that particular tree. In fact, Hutton mentions that:

there is a recognition of property in special trees, though they may grow in the land of another person, so much so that a dispute will arise as to the ownership of a tree which is actually growing on the ground of a third person not a party to the dispute. It is apparently enough for a man to say that he is preserving such and such a tree, and, provided that no one has previously set up a right to that tree, the tree becomes the property of the preserver, and he can claim damages for destruction or injury (Hutton 1921: 78).

It is not known at what stage the concept of individual ownership came into vogue. E.R. Grange, one of the British officers who toured the Naga Hills in 1840, noted that landed property among the Angamis was hereditary (quoted in Elwin 1969: 224). This indicates that the concept of private property was traditional and was not merely a usufructuary right found in most tribal societies as noted by Pathy (1988: 84-85).

Among the Angamis there are elaborate traditional norms regarding inheritance (Hutton 1969: 135-142). As a rule, landed property is inherited by male heirs while movable property may be inherited by females. What is significant is that a female can receive land from her parents that was bought by them, and a female can also buy land on her own. Thus property rights and rules of inheritance, though discriminatory against women, do not prevent them from owning or even inheriting landed property.

According to traditional law, an owner can sell his land or forest according to his will. But there are various restrictions as to whom he can sell it to. His clansmen have the first right to buy. If there is no buyer among his clansmen, he can sell it to someone within the *khel*. Only when there is no buyer within the *khel*, he can sell it to someone

in the village. In former times selling land to someone from another village was out of the question because of existence of rivalry and even enmity between the villages. At present, however, one can sell his land to an outsider. At the same time, the law forbids the sale of land to non-Nagas.. In the past, all sale was by barter, but now cash transaction take place. Though the sale of land and forest is possible, their sale is not easily done because land and forests are valuable as forms of wealth contributing to social status. The sale of land or forests owned by a clan can be done only by common consent. When an individual sells the land owned by him, he usually retains the ownership of the trees grown on the land, and the buyer of the land must respect such ownership. The buyer of the land can also buy the trees or he can reach an agreement that the trees will be removed within a stipulated period.

As already noted, in Nagaland traditional law regarding land and forests prevails over Indian laws thanks to Article 371 A of the Constitution of India. Chances of this special provision being changed are remote mainly because of the present political condition of ethnic conflict.

It is possible to conclude by saying that while private individual ownership of some forest land is a fact, the idea that a forest is a common natural resource in which a clan, khel and even the village as a whole has residual rights is accepted. Such residual rights can be exercised in case of need by any villager, but not an outsider. This can be seen in the norms regarding access to forests and forest produce.

### **Exploitation and Conservation of Forests**

Access to forests and forest produce is regulated by customary law, which recognises the rights of the owner, but also makes a provision for certain common rights.

The chief forest produce are timber and firewood. The owner of a piece of forest can cut trees for timber or firewood or employ others to do so. He can get as much timber or firewood as he needs. If he does have the desired type of timber in his personal property, he can get it from the common clan or village forest with the consent of the clan or village elders. Though a person can get as much timber or firewood

from his own forest as he needs, he cannot sell it. The principle that one can get timber and firewood only for one's needs but not for sale probably reflects the situation, as it existed in former times. In the past, no one sold timber or firewood simply because there were no buyers in the village, and the practice of selling it to outsiders did not exist. This past situation has been gradually turned into a norm more by observance than through conscious enactment.

When a person wants to get timber or firewood from the common clan or village forest, he must secure the consent of the elders. But no such consent is required to collect dry leaves or twigs and branches which a person can collect for fuel from anywhere in the village. This is probably a case of residual common rights in forests.

A similar norm exists for collecting green grass and fodder for the cattle and for grazing. Every Angami house has some cows. When the crops are growing in the fields, they are looked after by a cowherd, who takes them to the forest for grazing. In addition to such cowherds, there are now Nepali families employed by the Angamis to look after their cows, to milk them and to sell the milk. These Nepalis are allowed to collect green grass and leaves to feed the cows from anywhere in the forest, provided they do not indulge in wanton damage. It is important to note that the Nepalis are not the owners of the cows, but mere employees of the Nagas. No outsider can own or rear cattle in an Angami village.

Medicinal plants, edible fruits and leaves, tubers and roots for human consumption and to feed the pigs and other animals, can be collected by anyone from anywhere. But the general principle is that they should not be wasted. Any destructive method invites censure or even punishment in the form of fines.

The general rule that firewood should not be sold is observed by all the villages of Southern Angami except Mima and Mitelephe. In both these villages, people are permitted to sell firewood and charcoal. The explanation given by the villagers is that there are very few salaried persons and government employees in these villages. Hence there is very little inflow of cash into the two villages. But people need cash for various reasons. Consequently, the villagers have come to an understanding that they can sell firewood and charcoal. But even here,

there is a limit because one can sell only as much as one needs to raise cash. Those who violate this rule invite censure. However, the needs of the people have begun to multiply and increasing quantities of firewood and charcoal are sold. This needs to be watched closely because the culture can spread also to other villages.

Even while exploiting the forest for firewood and charcoal, the people of Mima and Mitelephe do not clear the forest completely. The normal practice is to cut those trees that have grown sufficiently big, leaving the smaller ones to grow. This is really a method of harvesting the forests, so that the forest itself is not destroyed. However, there are already signs of over-harvesting and over-exploitation.

An interesting feature in the Angami area is that a tree is never cut and uprooted completely. Two or three feet of the tree trunk are usually left. Often such a trunk grows branches and the growth of these branches is fast because of the strong trunk with its deep roots. This practice is probably an adaptation of pollarding Alder trees which symbolise their sustainable forest management.

Detailed information on the Alder tree and its cultivation is provided by Zeliang (1985). The botanical name of the Alder tree found in Nagaland is *Alnus Nepalensis*. It grows well at altitudes ranging from 1,000 to 2,000 metres. In Nagaland in general, and the Angami area in particular, the Alder tree is cultivated in the *jhum* fields. It is a fast growing tree and yields a large quantity of firewood. Its profuse leaves curl up and when they dry up, they fall to the ground. The curled up leaves trap moisture and make a mulch, thus enriching the soil. The roots of the Alder do not go deep, but spread sideways and quickly develop nodules (colonies of bacteria), which help in further enriching the soil by fixing nitrogen. The spreading of the roots also prevents soil erosion.

An important aspect of Alder cultivation is pollarding or cutting the branches from the main trunk. An Alder is pollarded for the first time when it is about ten years old. The trunk is cut horizontally at a height of about two metres from the ground. The trunk then sprouts more than fifty coppices or small branches. When the coppices are about one year old, only five or six of them are left on the main trunk and the others are cut. The remaining coppices grow fast and in four to



six years, the trunk is ready for pollarding again. The branches that are thus cut provide a large quantity of firewood. It is estimated that a plantation of one hundred and fifty hectares can meet the fuel wood requirements of one hundred Naga families.

### **Modes of Agriculture and Forest Conservation**

According to Hutton (1969: 72-73), the most striking difference between the Angamis and other Naga tribes is their cultivation of wet rice. While most other Naga tribes cultivate only by *jhuming*, the Angamis cultivate wet rice in terrace fields or *panikhētis*. There are two types of terrace fields: some have a regular and assured supply of water from the streams, while others depend chiefly on the rains. Thus the Angamis have both wet and dry terrace fields. In addition, they also have *jhum* fields. Information on the extent of these three types of fields in the Southern Angami area is given in Table 4.3. Though the figures found in Table 4.3 seem to be precise, they are actually no more than intelligent estimates simply because accurate land records are not available.

The nature of *jhuming* in Angami areas has some special features, and is best described as dry cultivation rather than *jhuming* in the strict sense. This is because there is no significant *shifting* or rotation of fields. Such dry cultivation is practised by the Angamis on the higher and steep slopes of hills where it is difficult to cut terraces for wet cultivation, or where it is not possible to irrigate the fields from a stream. These fields are sloping, rather than level, but soil erosion is prevented in two main ways. The lower sides of the fields are bounded by stones, often as elaborately as is done in the terrace fields. Small logs or branches of trees are so placed across the slope in a field that they prevent rain water from taking away the topsoil. Further, rows of Alder trees are grown in these fields. The stumps of these Alder trees are very old, and the branches are cut before a field is brought under cultivation. The leaves and smaller branches are burnt for ashes that serve as manure, and the bigger branches are cut into small pieces to be used later as firewood. Fields of this type are used to grow the so called dry rice and maize as also to raise vegetables and potatoes, ginger and chillies, some of which are sold for cash. Multiple cropping

is common, with different plants and creepers yielding fruit at different times. These fields may be cultivated every year, or left fallow for a year or more, if there is no need to cultivate them. The deciding factor is the availability of cash from other sources such as Government employment.

In some southern Angami villages such as Phesama, Kigwema and Jakhama, many dry fields that were allowed to lie fallow for as long as two decades have been brought under cultivation again recently. When asked for the reasons for this extension of dry cultivation, people usually give two reasons, namely, the need for more food, and the need for cash to buy consumer goods and to defray the cost of the education of children. In any case, the dry cultivation practised by the Angamis does not lead to cutting down of any forest. On the contrary, it promotes the growth and harvesting of Alder trees. What is significant is that *jhuming* is usually synchronised with the cultivation and pollarding of Alder trees. It can be easily seen that this type of *jhuming* does not involve the clearing and burning of forests as in other areas. As such it is not a threat to the tree cover even with a short cycle.

As already noted, the principal form of agriculture among the Angamis is the cultivation of wet rice in terraced fields or *panikhetis*. Hutton (1969: 72-73) describes it as follows.

The method of preparing land for wet cultivation is to dig and build the side of the hill into terraces of from 2 to 20 feet broad, 200 feet broad, if the ground is level enough. The stones taken out of the soil are used to bank up the walls of the terraces. The terraces are irrigated by channels which carry water from some stream or torrent for a distance that may sometimes be measured in miles, some fields being fed on the way. Each terrace, of course, cannot have its own channel, but usually obtains water either from the next terrace above it or from one of the terraces in the same row, the terraces being so carefully graduated that the water may flow from terrace to terrace round a whole spur and back again to a point little below that from which it started...

Though no manuring of *jhum* land is ever attempted, manure in the form of cow dung collected by the owners of the cows, is frequently applied to the terrace fields, and cattle are often turned into the terraces

to graze in the cold weather with the same end. In addition to manuring, the only other preparation of the fields for the crop consists of digging them over,.... and when the fields have been flooded, of puddling them. The puddling of the fields drowns the weeds already overturned in the surface soil, and when they have sufficiently decomposed and mud is well puddled, the field is ready for transplantation.... Meanwhile the seed paddy has been sown thickly on a patch of dry ground late in March or early in April, and the seedlings are ready for transplantation about the beginning of June... After transplantation the fields need cleaning two or three times.... The harvest is usually ready about the end of October and the first half of November.

The practice of terrace cultivation or *panikheti* described by Hutton has not changed, except in some minor details such as the occasional application of artificial manure like urea, and somewhat rare use of a power tiller.

Some British observers have said that all the land with an assured supply of water is turned into terraces or *panikhetis*. For instance, writing in 1872, Godwin Austin says that “not a square yard of available land has been left” while preparing terraces (quoted in Elwin 1969: 588). But this is not true because patches of forest are left between the terrace fields. In fact, already in 1873 Brown noted: “The terraces are relieved by occasional patches of open jungle, and the slopes of the hills immediately underneath the villages are always well wooded” (quoted in Elwin 1.969: 589). Thus there are, fairly large patches of forests between the stretches of terraces. This practice is probably based on centuries old observation that trees protect soil and water, a fact that modern scientists note when they say that:

Trees help the soil to store water and to control the rains by centralising clouds above them. If forests are not kept there will be less water and less soil for the *panikhetis*. There is a sharp boundary between the land under forests and the land under *panikheti*. This is because the fertility of the *panikheti* directly depends on the amount of land people can manage to keep under forests (Peseyie and Imchen, 1984: 21).

It is worth mentioning here that terrace cultivation among the Angamis does not involve the use of animal power. All the work is

done by hand and with simple implements. As we shall see later, women do most of the work while men play a secondary role. Because of the predominance of females in cultivation, women have a greater say in agricultural operations, and consequently a relatively high social status of women. In this sense, Angami terrace cultivation may be termed female farming, an expression used by some scholars in the context of shifting cultivation (Deeney and Fernandes 1992: 65).

### **Religious Beliefs**

It has been observed by scholars that religious beliefs play an important role in forest conservation. For instance, Deeney and Fernandes (1992: 71) note that the tribals have built myths around forests and trees because mere social control without divine legitimisation is difficult to enforce in a traditional society. In fact, the totemistic religion of the tribals provides an easy background for such myths. In fact, many tribes have a totemistic religion, with trees, plants and animals as the totems of tribes and clans.

Their myths of origin usually corroborate the significance of totems. In their turn the totems and myths combine to legitimise and ensure the sustainable use of the resource. For example, the Ankiya Kond tribe of Ganjam district in Orissa claim descent from a Kond boy and his wife, the various parts of whose bodies were made of *bel* fruit, *sarai* wood, *Karela* (bitter gourid), mushrooms, oranges, etc.

Consequently these trees are considered sacred and given protection. Most middle India tribals confer sacredness on economically useful trees like *sal* and ensure that they are not cut. The Kond tribals of Kalahandi take the *salap* tree as their totem. They believe that when the whole world was submerged under water, all people except two children died. They survived on a hill and the *salap* tree gave them its juice and kept them alive. So this tree cannot be cut. These are but a few examples of trees being protected by conferring a religious value on them or linking the origin and survival of the tribe with the preservation of the species. Common to all of them is their economic or medicinal value. Such trees and plants also play an important role in their rituals and religious on them or linking the origin and survival of the tribe with the preservation of the species. Common to all of them is their economic or medicinal value. Such trees and plants also play an important role in their ritual and religious practices. For example, among the most middle India tribals the wine offered to the gods has to be made from the

*mahua*, whose fruits, flowers and seeds are their food during the lean months (Fernandes, Menon and Viegas 1988: 164-167).

In this respect, the Naga tribes, including the Angamis, differ from their middle India counterparts. Their myths of origin deal with accounts of migration from elsewhere to their present habitat. Even individual villages have their own myths of foundation, usually reinforcing the idea of migration. According to legends most of the Southern Angami villages were situated at a place different from the one which they now occupy. Thus there is an absence of totemism among the Nagas regarding their origin. As for the Angamis, Hutton notes that he was not able to discover any trace of totemism, or of anything approaching it, among the patronymic and omnivorous Angamis (Hutton 1969: 390).

In spite of the absence of totemistic elements in their religion, the traditional religion of the Nagas, including that of the Angamis, is labelled as Animism. It is a system of beliefs and practices dealing with spirits. There are different types of spirits, both benevolent and malevolent, and some even indifferent. They communicate with the individual in dreams, but their will is also discerned through omens. Consequently, interpretation of dreams and divination have an important role in Naga life. This is true also in the case of the Angamis.

Animistic beliefs and practices have a very critical role to play in Angami society as means to social control. Angami political organisation was always highly democratic. In the traditional Angami political structure, the *khel* was the basic unit. Though the elders of the *khels* functioned as chiefs, their authority was nominal. Their orders were obeyed so far only as they accorded with the wishes and conveniences of the community (Hutton 1969: 142-143). Under such circumstances, the priest exercised an important role in social control (Bhattacharjee 1990: 105). This implies that the fear of the spirits was the most effective means of social control.

It is said that spirits in general, and malevolent spirits in particular, are feared rather than worshipped. Hence they are appeased or propitiated through sacrifices and other ritual practices, which Christian thinkers like Epao (n.d.) consider superstitions. But most Christians continue the rituals and practices linked to them. Some spirits are

personified and have names, but there are also nameless hosts of spirits. Angamis acknowledge the spirits of rocks, spirits of trees, spirits of lakes, and so on. Though all trees have their spirits, those of big trees are more powerful and are greatly feared. Besides, forests themselves are believed to be the abodes of the spirits. Therefore, while crossing a forest, an Angami takes a leaf and puts it behind his ears or plucks some leaves and places them on the ground. He believes that this will protect him from any undesirable attention of the malevolent or powerful spirits. If perchance he falls ill after crossing a forest, he will place a sacrificial chicken or egg or a metal coin at the site as an offering (Iralu 2000: 78-88).

The belief that the forests are the abodes of the spirits has some important implications for their exploitation and the cultivation of fields. Forests are the realm for the work “mainly of men, while fields are the arena where mainly women toil. Women may go to the forests to collect firewood and to carry it home, but cutting of firewood and timber is the exclusive work of men. Men cut the trees in the *jhum* field and burn the branches, but a woman will never perform these functions. Women do most of the work in the fields, though men may help in some ways. For instance, women carry all the implements and food material while going to a field, but men do not carry anything while going to or returning from the field (Merhotra 1992: 161-162). Thus there is a fairly clear division of roles in the work of men and women, with men concerned about forests and women about fields, including terrace fields. Though the two spheres, namely forests and fields, are not mutually exclusive, the separation between them is clear. This is brought out by a folktale according to which domestic animals belong to women, while wildlife is reserved for men.

However, even men cannot cut any tree for any purpose. Belief in the spirits of individual trees has a bearing on which tree is suitable for timber for building houses, and which one is fit only for firewood; Those trees that are used for timber cannot be used for firewood. Some trees are used for making images employed as substitutes for humans in the funeral rituals of those who die away from home and whose bodies are not found. Such trees cannot be used for firewood. Trees with blemishes like crossed branches or injured bark are not suitable

for timber. Only particular types of trees can be used for village gates. Under no circumstances can such trees be used for firewood. Only the best tree can be used for making village gates.

Every Angami village has several gates. Though these are often called village gates, they are actually the gates of the different *khels* that constitute a village (Marwa and Srivatsava 1992: 81). A gate is hewn from a single block of wood. When a gate needs to be replaced, there is an elaborate ritual for the selection of the tree to be used for the new gate, for the actual carving and transportation of the new gate, and for its erection and dedication. The tree selected for the new gate must be without any blemish. Before the tree is cut, a prayer is addressed to the tree. Again, at the time of the erection and dedication of the tree, a prayer is addressed to the gate. The words used in both these prayers show that the tree in its natural state in the forest and in its form as a gate are the embodiment of a spirit. Thus the belief is that the spirit of the tree used for the gate is not destroyed but only transformed. Such a belief exists also about the timber used for the construction of a house, particularly the house posts. Besides, it is common to find a large tree near a village gate, and it is said to be a guardian of the gate itself.

Though traditional Angami religion makes a distinction between the world of the humans and the realm of the spirits, between the roles and spheres of activity of men and women, it does not divide them in a mutually exclusive manner. Rather it acknowledges an interdependence of the two, under the tutelage of *Ukepenuopfu*, the creator or life-giving spirit. Under the protection of *Ukepenuopfu* women look after the fields and the domestic animals, and men exploit the forests and hunt for wildlife. The two spheres coexist in a mutually complementary and beneficial manner. Similarly, fields and forests coexist in a harmonious relationship.

Further reflection on the relationship between fields and forests could lead to the conclusion that the traditional religion also aims at the protection and preservation of the entire ecosystem. The protection of entire ecosystems is a common phenomenon among tribal societies. For instance, among the tribals of Chotanagpur, such protection was in the past accorded to three systems known as the *sarna*, the *akhara*

and the *sasan* (Deeney and Fernandes 1992: 70-71). The *sarna* was a plot with several hectares of thick forest growth in which tribal teenagers were initiated into adulthood. The *akhara* was a clearing in the forest used as a dancing ground. The *sasan* was the burial ground.

The Angamis did not have any of these institutions linked with the forest. Angami youth had their *morung* (dormitories) and they usually buried their dead near the house. Hence there are no sub-systems with a sacred character. Consequently it may be more accurate to say that the Angamis protected their entire ecosystem by investing the whole system with a sacred character, and the residential site with the greatest amount of sacredness through their animistic beliefs. It is such traditional animistic beliefs that have a significant bearing on the conservation of forests.

### **Sustainability and Equity**

By way of conclusion it may be said that a close look at the traditional agricultural practices of the Angamis reveals that they maintain a balance between fields and forests, and consider the forests as essential for a successful cultivation of their fields. This is not because they have had any scientific training but because of traditional wisdom based on centuries of observation. In other words, the traditional norms about access to forests and forest produce, the method of harvesting forests, and the cultivation of Alder trees indicate a systematic exploitation of forests that does not destroy but leads to conservation. Social control mechanisms ensure that each family has access to as much of the forest as it needs for its sustenance but that it is not wasted or over exploited.

Such social control mechanisms are not specific to the Angamis. They are found also among the tribals of Orissa (Fernandes, Menor and Viegas 1988: 159-170), Garos (Chakrabarti and Changsan 1996), Santhals (Sarkar 1996) and others. Similarly *jhum* has traditionally been environmentally sustainable in the North-East because of its combination of a fallow period of 18-20 years, soil conservation techniques, variety of crops and pigs growing on its waste providing much needed nutritional substitutes (Gangawar and Ramakrishnan 1992: 101-102).



Specific to the Angamis is the extension of social control mechanisms to individually owned land. In many cultures, water sources like tanks and ponds (but not wells) are treated as common in the sense that water has to be shared with the community or one's neighbours according to well laid down rules (Sen Gupta 1991). Angamis have rules concerning the use of other resources too on individual land. They may cut timber from their land for their own use but not for sale.. Neighbours may lay claim on a tree if they require it. Even after land is sold, trees continue to belong to the original owner. These mechanisms ensure both sustainable use and equitable distribution of resources.

Thus the Angamis, for that matter the Nagas in general, are different from most tribes of Middle India who have clan related totems linked to their myths of origin. The Angamis do not have totems or myths of origin. However, they have other religious beliefs and practices ensuring forest conservation. But they serve the same purpose in the sense that they combine with social control mechanisms to ensure the sustainable use and management of forest resources. Thus despite the differences, the same objectives are served.

The belief in the spirits gives a religious dimension to sustainable use, though the fear element (of the spirits) seems to be stronger among the Angamis than among the Middle India tribals. By linking sustainable use to the origin and survival of the tribe itself, the latter have been able to develop a vested interest in the very sustainable use of forest resources.

Such a vested interest may be difficult when fear is the main element, particularly in the context of what is perceived as the double threat to the tradition. The first is the conversion to Christianity. As stated above, some consider their traditional practices superstitious. But others feel that the two can coexist (Sinha 1996: 154-155). In reality most Christians among them continue their traditional practices. The second threat, viz., commercialisation is stronger than change of religion. One has seen it in deforestation by logging and recourse to fuelwood and charcoal in Mima and Mitelephe. The greenery remains in the Angami area. But with pressure from the commercial forces increasing and the need for cash income growing, also the forests of the Angami area

may feel the impact. That is where one sees the need to invent new modes of preserving the forest resources while meeting peoples needs. We shall discuss these mechanisms in the next chapter.

## Conclusion: Looking at the Future

On the basis of the data presented above, it is possible to identify the traditional factors that have contributed to the conservation of forests by the Angamis. They are: 1) the private ownership of land and forests, 2) the method of cultivation, both in the terrace fields and the *jhum* fields, and 3) religious beliefs. Though these traditional mechanisms have helped the Angamis in conserving their forests, changes have begun to take place affecting the extent and quality of forest cover.

In the past private ownership was an important factor in the preservation of forests. Even at present private ownership of land and forests is guaranteed by the special provisions of Article 371 A of the Constitution of India. Thus outsiders cannot buy land. Even Nagas may not easily buy land in the territory of another tribe partly because of the age-old antagonism and partly because of the on-going ethnic conflict. However, a good amount of land has been bought by the Government or has been gifted to the Government for such purposes as construction of roads, building of Government offices, the establishment of Zakhama military station and other common purposes. In addition, people themselves have built houses along the National Highway.

Most of the land thus used was formerly *jhum* land with Alder cultivation. Such a change has adversely affected the balance between forests and fields. While the area of fields has remained unchanged, the forest cover in the form of Alder cultivation has diminished. In all the villages of Southern Angami area, people admit that the extent and quality of forest cover has decreased in recent times because of two reasons: the extension of *jhum* cultivation and the harvesting of forests for firewood and timber.

Extension of *jhuming* in Southern Angami consists not so much in bringing new forest areas under cultivation as in the renewal of cultivation of *jhum* fields that were allowed to lie fallow for several years. This happened because there was a time when considerable

construction activity took place in villages like Kigwema and Jakhama when the Zakhama Military Station was established, and the local people were employed in quarrying stones and even in actual construction. When construction activity was over, the major source of cash inflow stopped. Alternatives to this source had thus to be found. The solution to this was the cultivation of cash crops in the *jhum* fields. Another reason given for the renewal of *jhum* cultivation is the need for more food for a growing population. In fact, there has been a rapid increase in the population of the Southern Angami area during the decade 1981-1991. However, this has been a minor reason compared to the need for cash. In fact, cash is needed to buy various articles including durable consumer goods like the TV, for travel and even the education of their children.

A similar reason is given for the increased exploitation of forest for firewood and charcoal in Mima village. But there has also been an increase in the need for timber for constructing new houses, particularly along the National Highway. A large number of houses have come up along the National Highway during the past twenty years because people began to build a second house along the Highway in order to benefit from the transport facilities that became available. Though most of the timber has been used for the construction of houses, there are some instances of people selling timber to others. In this case, it is not merely a question of cash for buying things needed for the household but also a desire to make money. This is a new development that can be traced to the desire to possess luxury items, to the forces of the market economy, and ultimately to the spread of a consumerist culture. These practices can become destructive of forests.

In the past, wasteful and selfish exploitation of forests by individual owners was prevented by a system of social control by the villagers. The village assembly played a minor role in this process because of the highly democratic system of village polity. In recent times this form of social control has weakened further, and there are instances of powerful villagers defying public opinion with impunity. But new forms of social control are slowly emerging, the most important of them being the activist role adopted by the student associations and youth organisations at the village level. In most Southern Angami villages,

student associations have been issuing notices not to indulge in wasteful practices, and promoting tree plantation. It would be in the best interest of the people to support such initiatives by the students and the youth.

In the past, religious beliefs played an important role in the conservation of forests. But today most of the Angamis have accepted Christianity, and belong to different Christian churches and denominations. However a sizeable number continue to practise traditional religion. In most villages of Southern Angami area, those who practise traditional religion are an influential group in religious matters because only the traditional priest can take important decisions. They decide on the days of *genna* when it is forbidden to work, and determine when different agricultural activities can begin and should end. The traditional priests decides when the whole village is *genna*, that is, the whole village becomes sacred so that no one from outside can enter the village. Such days of *genna* are taken so seriously by all, including the Christians that no member of the village would dare to challenge the decisions of traditional priests or go against them for fear of retribution from the spirits. Thus in spite of Christianity being the religion of the vast majority, traditional religion holds sway in many aspects of life and continues to influence forest conservation.

But further changes can be expected because of the influence of the commercial forces and the need for money for new needs. Fear of the spirits is still strong, but is bound to weaken because of these needs and in the name of true Christian beliefs and with much greater vigour, in the name of commercial profit. It is imperative, therefore, that Christianity provides suitable substitutes to the ideological support that traditional Animism accorded. It is possible for Christian thinkers to play this role because the people are becoming aware that the decrease in the forest cover has a negative impact on their environment. In particular, they are becoming aware that the availability of water may decrease. Hence, the people of Southern Angami area refused to provide water to enhance the public supply of water to Kohima Town even when they were offered attractive monetary compensation.

It is essential that the biological potential and the beneficial effects of forests are recognised and people made conscious of the importance of forests in their life. The beneficial effects of forests on soil and

water conservation are well known. There is a popular belief that forests enhance rainfall, and the Angamis are apparently aware of this. But what they probably do not know is that their forests are a source of new food plants, new medicinal plants, new gums and resins, new colourants and pesticides. Probably they also do not know that their forests are valuable resources of genes in the wild relations of cultivated plants. If the Angamis were to realise this, they would certainly strengthen their traditional forms of forest management and conservation methods. In this process the educated youth and the Christian leaders have to play an important role.

## References

Allen, B.C. 1905. *Gezetteer of Naga Hills and Manipur (Assam District Gazetteers, Vol IX)*, Shillong: Assam Secretariat Press.

Angami, Thepfulhouvi. 1990. "Flora and Fauna of Nagaland," in *Nagas 90*, Kohima: Naga 90 Committee.

Ao, Tajenyuba. 1993. *British Occupation of Naga Country*. Mokokchung: Naga Literature Society.

Barpujari, H. K. 1998. *North East India: Problems, Prospects and Policies*. Guwahati and Delhi: Spectrum Publications.

Bendangashi. 2000. *Glimpses of Naga History* (First edition 1993). Kohima: Sopungwati Ao.

Bhattacharjee, Jayanta Bhusan. 1990. "Social and Political Institutions of the Angami Nagas" in Jayanta Sarkar and B. Datta Ray (eds) *Social and Political Institutions of the Hill People of North East India*. Calcutta: Anthropological Survey of India, pp 102-116.

Bordoloi, B.N. 1998. "Tribal Land Tenure System and Land Alienation in North-East India" in S. N. Misra (ed). *Antiquity to Modernity in Tribal India, Vol III*. New Delhi: Inter-India Publications, pp. 15-65.

Census of India 1991. *Nagaland State: District Profile 1991*. New Delhi: Census Publications.

Changkiri, Atola L. 1999. *The Angami Nagas and the British, 1832-1947*. Guwahati and Delhi: Spectrum Publications.

Chaube, Shibanikinkar. 1973. *Hill Politics in North-East India*. Calcutta: Orient Longmans.

Colchester, Marcus. 1999. "Introduction" in MRG (ed). *Forests and Indigenous Peoples of Asia*. London: Minority Group International, pp 4-8.

Das, N. K. 1987. *Ethnic Identity, Ethnicity and Social Stratification in North-East India*. New Delhi: Inter-India Publications.

Das, N. K. 1990. "The Naga Political Systems" in Jayanta Sarkar and B. Datta Ray (eds). op. cit. pp 97-101.

Das, N. K. 1994. Naga: Angami in Singh, K. S. (Gen. ed) N. K. Das and C. L. Imchen (eds). *People of India, Nagaland*. Calcutta: Anthropological Survey of India and Seagull Books, pp. 63-75.

Deeney, John and Walter Fernandes. 1992. "Tribals: Their Dependence on Forests, Their Traditions and Management Systems." in Walter Fernandes (ed). *National Development and Tribal Deprivation*. New Delhi: Indian Social Institute, pp 49-75.

Dewan, Vijay Kumar. 1999. *North-Eastern Region: Forest Acts and Rules*. New Delhi: India Law House.

Downs, Frederick S. 1983. *Christianity in North East India*. Delhi: ISPCK.

Downs, Frederick S. 1992. *History of Christianity in India, Vol V, Part 5: North East India in the Nineteenth and Twentieth Centuries*. Bangalore: The Church History Association of India.

Elwin, Verrier. 1969. *The Nagas in the Nineteenth Century*. Bombay: Oxford University Press.

Elwin, Verrier. 1988. *A Philosophy for NEFA* (First Edition 1957); Third Reprint. Itanagar: Government of Arunachal Pradesh.

Epao, Vepari. n.d. *From Naga Animism to Christianity*. Kohima: Published by the Author.



Fernandes, Walter, Geeta Menon and Philip Viegas. 1988. *Forests, Environment and Tribal Economy: Deforestation, Impoverishment and Marginalisation in Orissa*. New Delhi: Indian Social Institute.

Gadgil, Madhav, S Narendra Prasad and Rauf Ali, 1983. "Forest Management and Forest Policy in India: A Critical Review," *Social Action*, 33 (n. 2, April-June), pp 127-155.

Gadgil, Madhav, 1989. "Forest Management, Deforestation and People's Impoverishment," *Social Action*, 39 (n. 4, Oct-Dec), pp 357-383.

Gazetteer of India, 1970. *Nagaland: Kohima District*, Kohima: Govt of Nagaland.

Ghosh, B. B. "Pattern of Use and Ownership of Land in Nagaland," in Atul Goswami (ed). *Land Reforms and Peasant Movement. "A Study of North-east India*, "New Delhi and Guwahati: Omsons Publications, pp. 183-190.

Ghosh, B. B. 1982. *History of Nagaland*. New Delhi: S. Chand & Co.

Govt of Nagaland. 1998. *Basic Facts: Nagaland*. 1998. Kohima: Directorate of Information and Public Relations Government of Nagaland.

Horam, M. 1992. *Naga Polity*: Reprinted. Delhi: Low Price Publications

Husain, Majid. 1988. *Nagaland: Habitat, Society and Shifting Cultivation*. New Delhi: Rima Publishing House.

Iralu, Esterine. 2000. *Folk Elements in Achebe. A Comparative Study of Ibo Culture and Tonymia Culture*. Kohima: Ura Academy.

Karotemprel, Sebastian. 1996. "Impact of Christianity on the Tribes of NorthEast India" in J. Puthenpurakal (ed). *Impact of Christianity*

on North East India Shillong: Vendrame Institute, pp 16-48.

Lotsuro, Angeline. 2000, *The Nagas: A Missionary Challenge*. Shillong: Vendrame Institute.

Marwa, I.S. and Vinay Kumar Srivatsava. 1992. "Khel Gate Social Structure: A Study of Their Relationship and a Note on the Place of Material Culture in Anthropology" in Subhadra Mitra Channa (ed). *Nagaland: A Contemporary Ethnography*. New Delhi: Cosmo Publications, pp.75-120.

Merhotra, Nikita. 1992. "Angami Naga Women: Some Reflections on their Status," in Subhadra Mitra Channa (ed). op. cit. pp. 147-180.

Govt. of Nagaland: *Nagaland Code Vol III*. 1986. Kohima: Government of Nagaland

NEC. 1995. *Basic Statistics of the North Eastern Region 1995*. Shillong: North Eastern Council.

Pandey, M.C. 1996. "Population Pressure on Forest Resources in the Northeastern Region" in Zahid Husain (ed). *Environmental Degradation and Conservation in Northeast India*. New Delhi: Omsons Publications.

Pathy, Jaganath. 1988. *Ethnic Minorities in the Process of Development*. Jaipur: Rawat Publications.

Peséyie, K. and T Imchen. 1984. *Nagaland. Paniketi on Mountain Slopes*. Kohima: Department of Agriculture, Government of Nagaland.

Philip, Puthuvail Thomas. 1976. *The Growth of the Baptist Churches in Nagaland*. Guwahati: Christian Literature Centre.

Pohsngap, Leaderwell. 1996. Response to Karotemprel Sebastian, "Impact of Christianity on the Tribes of North East India," in J. Puthenpurakal (ed). op. cit. pp 49-56.

- Pruett, Gordon E. 1974. "Christianity, History and Culture in Nagaland," *Contributions to Indian Sociology (NS), Number 8*.
- Rao, R. R. 1996. "Forests of Northeastern India. Prospects and Constraints on Utilisation," in Zahid Husain (ed). op. cit.
- Roy Burman, B.K. "Towards a People's Forestry in North East India," in M. Das Gupta et al. (eds). *Forestry Development in North-East India*. New Delhi: Omsons Publications, pp 163-175.
- Saleh, Swabera Islam. 1989. *Nagaland's Economy in Transitions since 1964*. New Delhi: Omsons Publications.
- Sanyu, Visier, 1992. "What Nagaland State Did to the Nagas," in Subhendra Mitra Channa (ed). op. cit. pp 265-274
- Sanyu, Visier. 1996. *A History of Nagas and Nagaland*. New Delhi: Commonwealth Publishers.
- Serna, Piketo. 1992. *British Policy and Administration in Nagaland, 1881-1947*. New Delhi: Scholar Publishing House.
- Shakespear, L. W. 1914. *History of Upper Assam, Upper Burma and North-Eastern Frontier*. London.
- Sharma, O.P. 1999. "Address by the Governor of Nagaland at the Fourth Session of the Ninth Nagaland Legislative Assembly on 16th March 1999," *The Warrior*, 28. (no 4. April) pp. 1-14.
- Sinha, A.C. 1994. *North-Eastern Frontier of India. Structural Imperatives and Aspects of Change*. New Delhi: Indus Publishing Company.
- Syiemlieh, David, 1999. *A Brief History of the Catholic Church in Nagaland*, Shillong: Vendrame Institute.
- Terhuja, Khrieleno. 1972. "The Christian Church Among the Angami Nagas," in K. Suresh Singh (ed). *Tribal Situation in India*. Shimla:

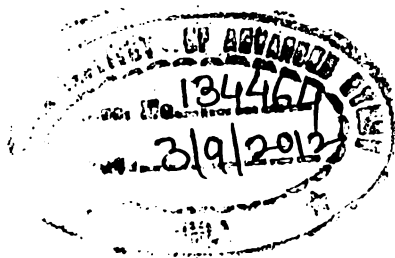
Indian Institute of Advanced Study, pp. 294-301.

Thepfulhouvi, Angami, 1990. "Flora and Fauna of Nagaland." in *Nagas* 90. Kohima: Naga 90 Committee.

Thong, Joseph S., 1997. *Head-Hunters' Culture: Historical Culture of the Nagas*. Tseminyu Khinyi Woch.

Yonuo, Asoso, 1974. *The Rising Nagas: A Historical and Political Study*. Delhi: Vivek Publishing House.

Zeliang I., R. Kevichusa and T. Angami, 1985. *The Use of Alder Tree*. Kohima: Government of Nagaland. ■



While forests in many parts of Nagaland are being destroyed by the commercial forces and the people themselves, the Angamis have preserved them. This monograph tries to find out why this has happened. In this attempt the author studies the states of the forests in Nagaland as a whole and situates the Angami area in this context. Their traditional forest management systems become meaningful within this perspective. But one wonders whether these forests will survive the new onslaught of the commercial forces. The author believes that they may not be preserved unless many positive steps are taken and an ideology of sustainable development evolved to complement their traditional religion that ensured a sustainable use of the resource.

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