CHAPTER VI

EMERGING TRENDS IN FOREST MANAGEMENT

AMONG THE NAGAS

The Nagas have experienced changes in their socio-economic, political and cultural life as they came in contact with other societies, and there is a rapid transformation taking place in the contemporary Naga society as a result of the modern education, change from their traditional religion to Christianity, transformation from a subsistence economy to money economy and various other developmental processes. As such, new innovative approaches are being incorporated in their traditional forest management practices in response to the impact of changes in their social, economic, political and cultural life. The impacts of recent changes on the Naga traditional forest management system and the emerging trends as a consequence as perceive during the course of this research are discussed below.

FORCES AND AGENTS OF CHANGE THAT IMPACTED THE NAGA’S RELATION WITH FOREST

The contact with other societies, especially with the coming of the British Rule to the land of the Nagas had brought radical changes in their social and cultural lives. This is evident in their everyday lives, beliefs, norms and values. In addition, the post independent period in India was a period of rapid development where industrialisation, modernisation, urbanisation etc., were taking place at an accelerating pace and the Nagas were also of no exception to the influence of such
forces of development and change. For the all round development of the new nation, the government aimed at harnessing all the resources of the country and this has an impact which was significant in relation to the utilisation and management of the natural resources among the Nagas. Some of the changes in the Naga society which had an impact on their relation with forest and traditional forest management practices are-

i. **Conversion to Christianity**

The traditional religion of the Nagas is labelled as Animism (D’Souza 2005:53), the belief that natural phenomena, animate and inanimate alike are endowed with spirits or souls which effect consequences in society. As such, the Naga ancestors had intimate relationship with nature and believed and worshipped a number of spirits associated with rocks, mountains, rivers and trees. Thus, forest, rivers, trees were considered sacred and felling down of trees, collecting forest produces or cultivation were prohibited from these areas. Such beliefs and practices have helped regulate the utilisation of the forest produces and conserve the land and the surrounding forest.

However, with the advent of Christianity among the Nagas, they discontinued many of the practices that were associated with their traditional religion as they started to adopt Christian values and ethics. Believing and worshipping of the hills, mountains, forest, rivers, rocks and trees was considered a sin and it was stopped. Consequently the sacred relation they had with nature declined and the Naga’s relation with the forest which had a religious connotation, where their religious
activities were intrinsically linked with the land and forest and have a significant bearing on the preservation of their forest was weakened to a great extent.

It was not only their belief system that was affected by Christianity but their traditional practices, customs and cultures were considered as primitive and they were made to give up their old way of life. In this way, the traditional institutions like the Morungs or youth dormitory system where the young people were imparted knowledge about their tradition, art and culture disappeared, singing and dancing, ceremonies and festivals through which they relate about their lives, history and traditions, their perceptions and relations with nature and their surrounding started to slowly fade away because they no longer indulge in such activities as they were taught that singing and dancing during festivals, rituals performed during various ceremonies etc., was against the Christian way of life. In fact, today, their oral traditional and traditional practices are slowly disappearing and the present generations have little knowledge about their folklores, folk knowledge and folksongs and dances which are now sung and performed occasionally during special events or festivals only. Thus, Christianity has affected their relations with nature and environment, their beliefs and practices and such changes have a bearing on the Naga traditional system of forest management.

ii. Introduction of Formal Educational System

The introduction of the formal educational system in the Naga Hills was one of the most important factors that transformed the Naga society. Before the coming of the British rulers and the introduction of Christianity among the Nagas there was no formal educational institution in the land of the Nagas except the Morung which was
an institution based on traditional ways of learning, where the young Naga boys learnt about their culture and tradition, skills of warfare and histories about their community etc. The advent of the British administration in the Naga Hills led to the establishment of schools by the British officials and the Christian missionaries. Both the British officials and the missionaries had different intentions, with the British official’s main objective being to pacify the hostile Nagas and utilise the services of the Nagas after they were taught to speak, read and write Assamese or the vernacular language, and the Christian missionaries intentions was to teach the Nagas to learn how to read and write so that they could read the Bible and other Christian literatures. Though the officials and the missionaries had divergent intentions, the introduction of education brought many added advantages for the Nagas. They were not only able to read and write but became aware of the world cultures, ideas and values and they were able to get employment in various services sectors.

However, in this process, the traditional institutions like the Morungs and girls dormitories were neglected. This were centres of learning for the young Naga boys and girls, here they were taught living skills, art and crafts, the history and tradition of the village, folk songs and dances, folklores, knowledge about their land, forest and rivers were imparted by the older generations to the young boys and girls of the village. With the negligence of such traditional institutions, the histories of their land, people and society, the importance of a specific area, the significance of a ritual, festival or ceremony or knowledge about plants, animals and birds, their traditional ecological knowledge, their tradition and culture were also declining. For example, at present, many Nagas are not acquaint about their Traditional Ecological Knowledge,
and many of them cannot name and do not know the value of the plants, animals and birds found in their land. Moreover, the new educational system followed the western model where there was no place for learning about such traditional culture, knowledge and practices. And in the absence of any written records or documentations, their tradition and practices, and knowledge about their land, forest, plants and animals are gradually declining.

**iii. Changes in Material Culture**

The contact of the Nagas with new cultures and its influence upon them ensued in new changes in their material culture as well. Their simple artefacts and objects created by themselves from the natural materials they get from their surroundings were replaced by objects brought by the British administrators and missionaries and procured from the markets in Assam. W. C. Smith (2002) in his work about the acculturation of the Nagas, in particular the Ao tribe, mentions that, 'Lanterns and kerosene oil are gradually driving out the reed torches . . . Swedish safety matches are displacing the friction fire-making apparatus. The Aos used to kindle fire by drawing a bamboo thong back and forth over a piece of dry wood, but this instrument had already been displaced, except for ceremonial purposes, by the flint and steel when matches came into use. Metal cooking utensils are displacing their earthen potteries . . . Formerly the *dao*, or handbill, was the only cutting instrument they used, except for the small grain sickle; but now scissors, knives and axes are used for certain operations. Steel needles have entirely driven out those made of wood or bamboo; umbrellas are taking the place of palm leaves. Manchester cottons are making inroads into their weaving industry; wooden boxes or packing-cases, in
which the missionaries’ groceries have arrived, are found to be more satisfactory storage receptacles than home-made bamboo-baskets; white buttons are encroaching upon the cowrie shells as ornaments on clothing; coats, vests and sweaters, worn threadbare by the missionaries or officials, are found to be more convenient and comfortable than their own home-spun blankets; discarded or stolen bridle reins make stronger belts than the corded cotton; and “dollar watches” rather than the behaviour of animals, are coming into vogue for telling the time of day’ (Smith 2002: 180-181).

He also mentions about changes in their food culture, he writes, ‘Sugar is beginning to rival the bamboo shoots as a saccharine substance; tea is reducing the consumption of their fermented rice beer; small quantities of flour are purchased from the missionaries and from the Kayah traders; several new fruits and vegetables have been introduced through the gardens of the missionaries and officials. . . . A few tinned foods are purchased occasionally; and the age-long taboo against the use of cow’s milk as an article of food is being gradually broken’ (ibid: 181). In fact today Chinese, Indian and Intercontinental Cuisines are taking over their food culture and the Naga traditional cuisine has become more of a delicacy for the Nagas themselves.

There are noticeable changes even in their building material. Earlier, the Village gates or Khel gates, which are one of the most important structures of the village, were built of trunks of large trees that are devoid of any marks or scar. Building of the gates takes place after every few years, involving many rites and festival but all these has stopped and the village gates are at present permanent
concrete structures constructed with sands and cement. Even the house structure was such that roof was made of thatch grass or palm leaves, bamboo poles, wooden floor and bamboo matted walls. Now at present, wood, bamboo and timbers are replaced by metals, cement and bricks, and concrete buildings have mushroomed up in the towns and even in the villages. And in every household in the urban areas and even in some of the rural household, steel furniture, sofa seats and glass structures are replacing their wooden furniture, and wooden platters, plantain leaves and bamboo mugs are supplanted by steel, clay and ceramics dinner sets and tea sets.

Another very significant change in their material culture was change in their hunting and trapping equipments. Their simple spears, daos and arrows were replaced with the more sophisticated guns. As W.C. Smith (2002) wrote, ‘They were greatly impressed with the fire-arms . . . they were not slow in seeing the superiority of fire-arms over their own weapons . . . to possess fire-arms is now the most eager desire of a Naga, no matter to what tribe he may belong to’ (ibid: 180). It was not just their weapons but even their bamboo traps, cane bait were replaced by spring-loaded and steel-jawed traps. As guns replaced the traditional spears and daos, birds and animals were killed in larger number, as the guns could kill more and faster. Such extensive hunting resulted in the loss of biodiversity and gradual decrease of the fauna’s population. In addition, introduction of electric saws and machines for felling trees which can cut down more trees in a day as compared to the number of trees they cut in a week with their axes has lead to the heavy felling of trees and deforestation.
iv. Change in the Economy

Transition from a solely subsistence agricultural economy to money oriented economy and the introduction of public and private service sectors was another factor that impacted the man-forest relation among the Nagas. The livelihood strategy of the Nagas changed- agriculture, hunting, fishing, handicrafts and blacksmithing were replaced by new forms of occupations like government office employees, teaching, medical services, religious services like Pastorship, private business etc. With the introduction of such new forms of occupation where wages were paid in terms of money, the Naga economy was transformed into money oriented economy.

Trade and commerce was introduced and the barter system was replaced by money transactions where they could sell and buy the products in the market. Thus, agricultural products which was produced only for domestic consumption was transformed into a commercialised commodity, growing of traditional crops was replaced by growing of cash crops, fruits, medicinal plants and herbs and other commercial crops. Hunting and fishing which was carried out mostly as a community activity where the people hunt and fish together and the game meat and fish was shared among the community members assumed a more individualistic mode as it became a good source of earning money due to the increasing demand for the wildlife products as a delicacy and for its medicinal values. Moreover, logging of timber became one of the predominant occupations among the Nagas, as with the demand for timber for railways, industries, constructions heightened logging became the most lucrative business.
The transformation of the traditional economy brought many elements of progress among the Nagas, at the same time it ushered a consumerist society with the highest value being placed on money. Such changes had an impact on the relation and utilisation pattern of land, forest and its resources. The commercialisation of agricultural productions, commodification of the land and forest produces which became the most profitable source of earning money resulted in the over exploitation of the forest and its resources leading to deforestation on a large scale.

v. Administrative Changes

The creation of Nagaland Statehood in 1963 under the Indian Government led to the establishment of bureaucratic system of governance among the Nagas. Different administrative departments were established, and the State Forest Department was also established in 1963 with the objective to administer the forest of the entire state. In 1979, the Department was reorganised, whereby three Territorial Forest Divisions namely, Kohima, Mokokchung and Tuensang was established. At present the department is named as Department of Forests, Ecology, Environment and Wildlife, Nagaland which is divided into the Northern Territorial Circle and the Southern Territorial Circle under which there are seventeen (17) Forest Divisions, 27 Ranges, 17 independent and attached Beats, and six Functional Divisions which include Social Forestry Division, Working Plan Division, Silviculture Division, Forest Utilization Division, State Environment and Forestry Training School and Doyang Plantation Division. An important aspect of the Forest Policy of India was the empowerment and recognition of the Village Councils to manage the forest according to their customary laws and regulations and the
conservation and preservation of the forest through local community participation in the forest programmes and projects. Thus, in Nagaland, every village manages their land and forest under the supervision of their respective Village Council according to their customary laws and traditional practices, but at the same time, various government policies and programmes like conservation of the flora and fauna, biodiversity conservation, wood and timber harvesting, regulation of tree felling and sale of forest produces, transportation of forest products, implementation of forest policies, afforestation programmes etc., are implemented in all the Naga villages through the State Forest Department in collaboration with the Village Councils.

vi. Forest Policies

With the establishment of the state and its legal system, forest became a commercial commodity to be exploited and ownership defined and demarcated. During the British rule, to meet the demands of England, forests in India were commercially exploited without any conservational approach and due regard was not given to the vital bond shared between the community and forest. Like any part of the country, the influence of the British forest administration and policies was also felt in the land of the Nagas. Among the Nagas, forest and land are privately owned and managed, and though this private ownership of forest was recognised, the policy of treating forests as sources of revenue and raw material was still followed in the state till the formulation of the National Forest Policy of 1988. The National Forest Policy of 1988 states that at least one-third of the geographical area should be under forest cover. It further says that in the hills at least 66 per cent 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. Further, the National Forest Policy, 1988, incorporated the following provisions for the tribals of the country—Tribal People and Forests: Having regard to the symbiotic relationship between the tribal and forests, a primary task of all-agencies responsible for forest management, including the forest development corporations, should try to associate the tribal people closely in the protection, regeneration and development of forests as well as to provide gainful employment to people living in and around the forest. While special attention should be given to the following:

(i) Protection of Forests:

a. One of the major causes for degradation of forest is illegal cutting and removal by contractors and their labour. In order to put an end to this practice, contractors should be replaced by institutions such as tribal co-operatives, labour co-operatives, government corporations, etc. as early as possible.

b. Protection, regeneration and optimum collection of minor forest produce along with institutional arrangements for the marketing of such produce.

c. Development of forest villages on par with revenue villages;

d. Family oriented schemes for improving the status of the tribal beneficiaries; and

e. Undertaking integrated area development programmes to meet the needs of the tribal economy in and around the forest areas, including the provision of alternative sources of domestic energy on a subsidised basis, to reduce pressure on the existing forest areas.

(2) Protection of Tribal People Rights: The holders of customary rights and concessions in forest area should be motivated to identify themselves with the
protection and development of forests from which they derive benefits. The rights and concessions from forests should primarily be for the bonafide use of the communities living within and around forest areas, specially the tribals.

The life of tribals and other poor living within and near forests revolves around forests. The rights and concessions enjoyed by them should be fully protected. Their domestic requirements of fuel-wood, fodder, minor forest produce and construction timber should be the first charge on forest produce. These and substitute materials should be made available through conveniently located depots at reasonable prices.

The National Forest Policy also encompasses the following objectives:

a. Maintenance of environmental stability through preservation and, where necessary, restoration of the ecological balance that has been adversely disturbed by serious depletion of the forests of the country.

b. Conserving the natural heritage of the country by preserving the remaining natural forests with the vast variety of flora and fauna, which represent the remarkable biological diversity and genetic resources of the country.

c. Checking soil erosion and denudation in the catchment areas of rivers, lakes, reservoirs in the interest of soil and water conservation, for mitigating floods and droughts and for the retardation of siltation of reservoirs.

d. Increasing substantially the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands.

e. Meeting the requirements of fuelwood, fodder, minor forest produce and small timber of the rural and tribal populations.
f. Increasing the productivity of forests to meet essential national needs.

g. Encouraging efficient utilisation of forest produce and maximising substitution of wood.

h. Creating a massive people's movement with the involvement of women, for achieving these objectives and to minimise pressure on existing forests.

Accordingly, the Government of Nagaland formulated the State Forest Policy and programmes for preserving and managing the state forest with the following objectives:

a. Convert Jhumland areas into economically and ecologically sustainable woodlands

b. Regulate harvesting of forest produces on principles of sustainability.

c. Protect and conserve fauna and flora including endangered species.

d. Protect, conserve and manage Bio-diversity in and outside reserved Forests and Sanctuaries based on sound scientific principles for in-situ conservation.

e. Raise and develop commercially important species.

f. Bamboo Policy with valuable and active inputs from the Department has been formulated by the State Government (GON 2013-14: 32).

Further, in consonance with the Forest Policy, the State Government of Nagaland also articulated rules and regulations to deal with the different aspects of forests and its utilisations. They are:

a. Rules to regulate the export of forest produce, 1969.

b. Rules for preservation of wildlife in reserved forest, 1969;

c. Rules for the protection of forest from fire, 1969;
d. Rules to regulate the transport of Forest produce by land, air and water within and outside Nagaland, 1969;

e. Rules to regulate the salvage, collection and disposal of drift and other timber, 1969;

f. Rules to regulate the removal of orchids from the forests in Nagaland;

g. Rules for the quarrying of stones or collection of stones, gravel, shingle or sand from all forests in Nagaland, 1969;

h. Nagaland settlement of forest coupes and mahals by tender system rules, 1969;

and

i. Nagaland settlement of forest coupes and mahals by auction and sale system rules.

The introduction of these forest policies has led to the systematic administration relating to forest, the transit of forest products and the duty leviable on timber and other forest products. The National Forest Policy 1988, has also made provisions for the tribals, protection of the tribal people’s right in conformity with the symbiotic relationship between the tribals and the forest and the tribal economy which is mostly forest based. But how far these policies have been implemented and practised in true spirit, transparency of the policies, whether it brings benefit to the local population or not are some of the issues that need to be reconsidered. For instance, the question of the practicability of discouraging jhum cultivation which is a way of life for the Nagas and the question of how far these helps in contributing or whether it impinges on the rights and customs of the villagers, its impact on the livelihood income of the villagers is still a contested matter.
Photograph: 29 Glimpse of Logging Activities in Rural Areas of Nagaland
vii. Forces of Development

The post independent period in India was a period of rapid development where industrialisation, modernisation, urbanisation etc., were taking place at an accelerating pace. The government aimed at harnessing all the resources of the country for all round development of the new nation and the Nagas were also no exception to such forces of development. Some of the forces of development that had an impact upon the Naga’s relation with the forest are-

a. Industrial and Infrastructural Development: After India’s independence, with a vision to build up the new nation, numerous industries were set up and an overall built-up of the country’s infrastructure was initiated. Forest was found to be one of the potential natural resources for industrial and infrastructural development. Timbers were liberally used in construction of buildings, bridges, furniture and other structures. Forest based small and cottage industries like saw mill, veneer mill, carpentry workshop, etc., grew up all over the country pushing the demand for various qualities of wood. And large scale bamboo groves were denuded to meet the need of the paper-pulp for burgeoning paper mills (Shangpliang 2013: 105). Though no large scale industries were set up in Nagaland, its rich forest was systematically cleared for industrial use in other parts of the country. Like in other parts of the country, numerous saw mills, veneer mills and plywood units mushroomed up in Nagaland, and logging became a very lucrative industry. And natural resources such as cane, bamboos, sands, boulders were also commodified. The high demand for the natural resources combined with the desire for earning money has led to the emergence of a
perspective among the Nagas, where forest was viewed as an avenue of profit. And such changes resulted in the destruction of large tracts of forest land and over-exploitation of the resources.

**b. Development in Science and Technology:** Along with industrialisation and infrastructural development, science and technology was another field of focus for the nation-building in India. The scientific and technological growth has brought innovations and improvement in the field of agriculture, industry, defense, medical, forestry, transport sector etc. For instance, the Green Revolution in India started with the introduction of High-Yielding varieties of Seeds, fertilizers and application of modern agricultural techniques which increased the food production, thereby, improving the agricultural sector and making the country self-sufficient in food production. However, though the introduction of fertilizers and pesticides could increase the productions of the food and other agricultural products, its usages resulted in land degradation and decreased in the quality of the soil which further affected the land and the forest. Similarly, modern tools and machines which were faster and easier than the manual labours were manufactured. For instance, in earlier times it took a man the whole day to cut down a tree with an axe but today a man can cut down more than 10 trees in a day with the electric saw. In this way more trees were felled for timbers, constructions and for various industrial usages, thus resulting in large scale destruction of the forest and its resources.
EMERGING TRENDS IN FOREST MANAGEMENT PRACTICES AMONG THE NAGAS WITH REFERENCE TO WAROMUNG AND KHONOMA COMMUNITY

The mentioned changes in the social, cultural, economic and political sphere have led to the transformation of the Naga society. Such changes are in turn having an effective influence on their tradition and practices leading to the emergence of new trends in their land, forest and water management and utilisation system. Some of the emerging trends in relation to the management of forest in Waromung and Khonoma village are:

i. Changes in the Traditional Agricultural Practices

a. Method of Cultivation: Agriculture which is the main economic activity among the Nagas is substantially dependent upon forest. They mostly practise jhum/shifting cultivation, a practise where they have to clear the forest land and cultivate it for a period of around two years and shift to a new plot of land leaving the old plot fallow to regain its fertility. Often this results in the destruction of the forest as the forest has to be cleared for cultivation from time to time. But with change of time, many of the Naga communities are adopting settled pattern of cultivation. For instance, in both Waromung and Khonoma there has been a change as indicated in the given tables:
Table: 31 Method of Cultivation Practised in Waromung

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Method of Cultivation</th>
<th>No. of Households</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Jhum Cultivation</td>
<td>30</td>
<td>30.00%</td>
</tr>
<tr>
<td>2.</td>
<td>Wet Rice Cultivation</td>
<td>39</td>
<td>39.00%</td>
</tr>
<tr>
<td>3.</td>
<td>Jhum+ Wet Rice Cultivation</td>
<td>16</td>
<td>16.00%</td>
</tr>
<tr>
<td>4.</td>
<td>None</td>
<td>15</td>
<td>15.00%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


Table: 32 Method of Cultivation Practised in Khonoma

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Method of Cultivation</th>
<th>No. Of Households</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Jhum Cultivation</td>
<td>09</td>
<td>9.00%</td>
</tr>
<tr>
<td>2.</td>
<td>Terrace (Wet Rice) Cultivation</td>
<td>56</td>
<td>56.00%</td>
</tr>
<tr>
<td>3.</td>
<td>Jhum+ Wet Rice Cultivation</td>
<td>30</td>
<td>30.00%</td>
</tr>
<tr>
<td>4.</td>
<td>None</td>
<td>05</td>
<td>5.00%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


In both Waromung and Khonoma the number of household practising jhum/shifting cultivation has decreased. The table given above, indicates that out of the 100 respondents from Waromung, only 30 per cent of the household are now practising jhum cultivation, 39 per cent are practising Wet Rice Cultivation and 16 per cent practise both jhum and Wet Rice Cultivation, whereas, in Khonoma, out of
the 100 respondents, only 9 per cent are practising jhum cultivation, 56 per cent are practising Terrace (Wet Rice) Cultivation and 30 per cent practise both jhum and Terrace (Wet Rice) Cultivation.

However, the trend of change in Waromung and Khonoma differs. In Waromung, in the past, the villagers practised only jhum cultivation because of the difficulty to irrigate the land due to the nature of the terrain but Wet Rice Cultivation was introduced in the village in the fifties. In 1961, two households took up terrace cultivation with the encouragement and support of the Government and in 1962 two more households took up terrace cultivation (Ao1966: 64). During the course of time with the development of irrigation system many households has taken up Wet Rice Cultivation and now as many as 30 per cent of the households are engaged in Wet Rice Cultivation. When the villagers were asked why they have shifted to Wet Rice Cultivation from jhum cultivation, most of the respondents stated that it requires only some specific months of the year as compared to jhum cultivation where they have to labour on throughout the year in their field and it requires less workload so they can engage in some other resourceful activities also. And unlike in the jhum cultivation, they do not have to clear the forest land for cultivation as in Wet Rice Cultivation the plot for cultivation is permanently settled.

On the other hand, Khonoma is well known for its Terrace Cultivation since the time of their ancestors because of their traditional technique of terracing the fields efficiently, and even at present this practise is being pursued by majority of the villagers. One of the main reasons for giving up the practise of jhum cultivation
among the villagers in Khonoma was the destruction of their crops by the wild animals as its population has increased since the total prohibition on hunting.

However, the common reason given by the villagers in both Waromung and Khonoma for giving up jhum cultivation was that it was time consuming and labour demanding but the output is not proportionate to the work and time they put in. Such change in the method of cultivation from jhum cultivation where large area of forest has to be cleared for cultivation every year to Wet Cultivation where the plot for cultivation is permanent and no longer requires the clearance of forest for new plot has aided in the preservation of more forest lands.

b. Types of Products Cultivated: Along with the changes in their method of cultivation, there were changes in the types of crops they grow and its usages. Generally, the Nagas grow rice which is the main staple crop, additionally chilli, tomatoes, brinjal, ginger, garlic, pumpkin, cucumber, gourd, yam, lentils, beans, sesame, maize, millet, Job’s Tears etc., are grown in their field. In the past most of the crops grown in the field were for the household consumptions only but now the villagers grows the crops on a larger scale and sell it in the nearby urban markets for their income.

Also selective harvesting of crops which is of higher utilisation value and more profitable is noticed in both Waromung and Khonoma village. For example, in Waromung, varieties of sticky rice and millet were cultivated on a larger scale in the past but the production of these crops has declined at present. The reasons stated by the villagers for the decline in the production of these crops were- firstly, in the past, their ancestors grew these crops on a large scale because the sticky rice and millets
were used for brewing the traditional drink *azü* (rice beer) which were used during religious rituals, marriage and death ceremonies, festivals, Feast of Merits and other social events, and for their daily consumptions as well. But with the conversion to Christianity, rituals based on their traditional religious practice, Feast of Merits, ceremonies has been stopped, thus, the usage and consumption of rice beer is no longer prevalent, hence, growing of such crops has declined since its utility value has decreased. Moreover, the villagers mentioned that the traditional crops, especially the red rice and sticky rice, the productivity is lower than other crops so they prefer to cultivate those crops which give higher quantity of produce which can be utilised for household consumptions as well as marketed and earn some money.

Similarly, in Khonoma also, the villagers mentioned that most of them cultivate the Job’s Tears, which is one of their traditional crops, on a smaller scale and even the production of millet and red rice and sticky rice has reduced. They explained that these crops were mostly used for brewing local rice beers for their own consumption and for various uses during their religious rituals, festivals, marriage, death, feast of merit and other social ceremonies. But now with the change in their social, religious and economic live the utility value of these products have declined because these days very few people consume rice beer as majority of them are Christians now and they no longer observe the various rituals and ceremonies as their ancestors. Another reason mentioned by the villagers of Khonoma was that, crops such as millet and Job’s Tears attracts the attentions of many wild animals which comes to eat these crops in the fields and in the process destroys the other crops as well which causes heavy losses for them. But due to the strict prohibition on
hunting in the village it becomes very difficult to control the wild animals that are
destroying the crops which make it more difficult to cultivate these crops.

In addition, the communities from both Waromung and Khonoma village also
produce different produces in their wet paddy fields apart from paddy rice. For
instance, fish fingerlings are introduced in the paddy field in the month of June and
July right after the transplanting of rice. The fishes are harvested in the month
September and October when the water is drained from the field. Also post-harvest,
they grow cash-crops such as potato, cabbage, carrot, garlic, ginger, tomato, beans
etc., in the field. The fishes and the vegetables forms a rich diet for the individual
household as well as a good source of income when sold in the market.

Thus, among the Nagas, there is an increased practice of selective cultivation
of crops that have higher economic potentials and utility values and the production of
those products with lesser utility and economic values are declining. And such new
trends of selective cultivation of crops can be said to be as a result of the change in
their economic and social lives.

ii. Practice of Diverse Economic Activities

Related to the changes in the method of cultivation and types of crops
cultivated, there are changes in the pattern of economic activities as well. Apart from
the agricultural activities, the villagers are nowadays engaging in different activities
such as growing of cash crops, establishing plantations, nurseries etc.
Table: 33 Economic Activities in Waromung

<table>
<thead>
<tr>
<th>Categories</th>
<th>No. of Households</th>
<th>Total No of Households</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Crops</td>
<td>10</td>
<td>100</td>
<td>10.00%</td>
</tr>
<tr>
<td>Orchards</td>
<td>62</td>
<td>100</td>
<td>62.00%</td>
</tr>
<tr>
<td>Betel plantation</td>
<td>59</td>
<td>100</td>
<td>59.00%</td>
</tr>
<tr>
<td>Rubber Plantations</td>
<td>48</td>
<td>100</td>
<td>48.00%</td>
</tr>
<tr>
<td>Tree Plantations</td>
<td>40</td>
<td>100</td>
<td>40.00%</td>
</tr>
</tbody>
</table>


Table: 33 shows the different types of economic activities that are emerging in Waromung village at present. Apart from cultivating rice and other agricultural produces on a subsistence scale, they have started growing crops such as cabbage, potato, tomato, cucumber, yam, maize, pulses, oilseeds, tobacco, tubers etc., on a commercial scale. Out of the 100 respondents, 10 per cent of the respondents stated that they are engaged in growing cash crops and selling it within the village or in Mokokchung town market. 62 per cent of the households out of 100 households have established orchards, mostly orange and litchi orchards, which they sell it in whole sale to suppliers or sell it in the village itself. Out of 100 households, 59 per cent are maintaining betel plantations. The respondents stated that the betel leaves of the village are in high demand for its good quality and they can sell it in a good price to the dealers from Assam. They mentioned that the betel leave trade between the villagers and the Assamese traders is an old- age practice since the time of their
forefathers and has been handed down from one generation to the next. Establishment of rubber plantations is the most recent activity that has been taken up by the villagers. 48 per cent of the households out of the 100 respondents have started rubber plantations. The villagers mentioned that they initiated the rubber plantations with the aid of the State Government, which, after testing the suitability of the soil and the climate for the rubber plants in the village have provided them with rubber plant saplings to start the plantations. Many of the villagers have started to establish rubber plantations and those who do not have any rubber plantations also stated that they want to start the rubber plantations because selling of the rubber latex to the industries in Assam and to various dealers is one of the most profitable businesses as of now. The villagers have also started tree plantations in their agricultural land, out of the 100 respondents 40 per cent of the respondents mentioned that they have tree plantation in various areas of their land. They plant various species of trees such as Teak (*Tectona grandis*), Gamari (*Gmelina arborea*), Hollock (*Terminalia myriocarpa*), Titasopa (*Michelia champaca*), Neem (*Lannea axillaries*), Alder (*Alnus nepalensis*) etc., for their personal use as well as to sell the timbers.

The reason given by the villagers for the development of such ventures was that from the jhum cultivation they could harvest crops for their household consumption only and if the harvest is good, they could either sell the surplus or sent it to their family members who are staying in the urban areas. But from the orchards, betel, tree and rubber plantations, though it takes time for more than 3 or 5 years to harvest the produces, once they start harvesting the products, it is a good source of
income for them. Moreover, the villagers also mentioned that the maintenance level of the plantations are low compared to the jhum cultivation because unlike the jhum fields where they have to work for the whole month throughout the year but gets less output, on the plantations they have to struggle through the initial period of plantations only but once it starts producing they can enjoy the harvest for more than five to six years and in addition they can earn a good amount of income through the sale of the produces.

Table: 34 Economic Activities in Khonoma

<table>
<thead>
<tr>
<th>Categories</th>
<th>No of Households</th>
<th>Total No of Households</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Crops</td>
<td>54</td>
<td>100</td>
<td>54%</td>
</tr>
<tr>
<td>Nurseries</td>
<td>15</td>
<td>100</td>
<td>15%</td>
</tr>
<tr>
<td>Tree Plantations</td>
<td>24</td>
<td>100</td>
<td>24%</td>
</tr>
</tbody>
</table>


Similarly, in Khonoma also, apart from the Wet Terrace Cultivation and jhum cultivation, the villagers are growing cash crops, maintaining nurseries and tree plantations. The table above indicates that out of the 100 households 54 per cent of the households are involved in growing cash crops, 15 per cent out of 100 households have nurseries and 24 per cent of the households out of the 100 households are involved in tree plantations. The villagers grows cash crops such as potato, tree tomato, cabbage, carrot, garlic, squash, ginger, gourd, beans, brinjals etc., and sell it in the nearby markets of urban areas like Kohima, Ghaspani, Piphema and Dimapur. The villagers mentioned that they have started growing cash crops as there
is a high demand for it in the market, especially potato, cabbage, squash and garlic of Khonoma village is in high demand in Nagaland, thus, it is a good source of income for the villagers. Here, the number of households that grows cash crops is more as compared to Waromung because of its near and easy accessibility to the urban markets. They have also started nurseries of herbs, medicinal plants, aromatic plants and flowers. One of the mostly grown plants in the nurseries and plantations is the ginseng plant. The villagers mentioned that many of them plant ginseng since its market value is very high because of its medicinal value and they can earn a good profit by selling it. Tree plantation on large scale is another activity which the villagers of Khonoma are engaged in. They plant Teak (*Tectona grandis*), Oak (*Quercus serrata*), Gamari (*Gmelina arborea*), Hollock (*Terminalia myriocarpa*), Titasopa (*Michelia champaca*), Bonsum (*Phoebe goalparensis*), Khokon (*Duabanga sonneroitoides*) and Alder (*Alnus nepalensis*) for construction purpose as well as to sell the timbers. But in Khonoma, people mostly plant Alder trees only as it is naturally grown there and they are well aware of the benefits of the Alder tree in terms of its utility value as well as its economic value.

Additionally, in Khonoma, after its declaration as the ‘Green Village’ alternative economic activities such as opening Home Stays for tourist, working as tourist guide, plying taxis, marketing of their traditional items and showpiece etc., are recent economic developments that are being established in the village.

Thus, in both Waromung and Khonoma, though there are some basic differences, different types of economic activities are emerging. One of the main reasons for the emergence of new economic activities is the transition to a cash
economy, which led them to establish economic activities where they could produce not only for their own subsistence but cultivate products from which they could earn their income. At the same time, this has aided in the conservation of their forest because once the plantations are established they do not have to clear the forest now and then, thus it curtails downs the destruction of forest land for cultivation purposes. Moreover, the tree plantations help in reducing the felling of trees from the forest for firewood and timber, thereby it helps in maintaining the forest cover of the village and the surrounding.

iii. Commercialisation of Natural resources

As the economies of the communities are gradually liberalised and a wave of consumerism is setting in, the income needs of the people have been steadily growing. Such changes have its impact resulting in large scale commercialisation of forest products, mainly Non-Timber Forest Products (NTFP). In the past, the forest produces were utilised for the household’s subsistence but with the transition of the economy, the natural resources are commercialised in a large scale being one of the best sources for the State Revenue income. At the same time for most of the families from the rural areas selling of the forest produces is the sole means of earning an income. Timber, sand, boulders, minerals are marketed both within and outside the State for industrial and infrastructure purposes and Non-Timber Forest Products like rattan, bamboos, medicinal and aromatic plants, honey and bee-wax, broom grass, wildlife products, wild leaves and vegetables, fruits, etc., are marketed to meet the needs and demands of the community. However, though commercialisation of natural resources is a good means of income for the community, the unbalanced
nature of its commercialisation where the demand for the products is higher than the supply and the prospect of it as a means to earn more money has led to the over exploitation of the forest and its resources.

iv. Tree Plantation Practices and Management

It has been a traditional practice of the Nagas to grow and manage trees along with agricultural crops or plant it in the surrounding areas for ecological, practical and economic gain. For the Nagas, the management of the trees starts when they clear and burn the forest land for jhum cultivation during which the trees are never cut-down completely but 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 root. For example, in Waromung village, when clearing the forest for jhum, the villagers cut small trees, bushes and shrubs but big trees with more than 61cms circumference of the trunks are never cut but only the branches are lopped off and the smaller trees are cut about 8cms above the ground (Ao 1966: 58). Whereas in Khonoma village, the Alder trees on their jhum field are never cut down but they have a well established system of pollarding the Alder trees where the main trunk is cut-off at the height of 2 m from the ground to let the coppices to sprout which are subsequently harvested later. Apart from the naturally growing trees, the villagers in Waromung plant trees of fruits such as banana, orange, sungtula, metiong, litchi, etc. and bamboo and fast-growing native shrubs and trees in their field. But in Khonoma, they have a well established Alder tree based jhum cultivation. As such they grow other species of trees within the village surroundings but in their fields only Alder trees are grown. The Nagas traditional practices of
growing trees along with their crops are based on their age-old knowledge which is
based on their everyday experience and intimate linkage with the nature. Such
practices have aided them in controlling the erosion of the soil, enhance the
productivity of their crops and provided them with timber and firewood. It has also
led to better land management system and reduced the pressures on forest for timber
and firewood.

Building upon such Naga traditional agricultural practice, the Nagaland
Environmental Protection and Economic Development (NEPED), which is a project
jointly funded by the Government of India and Canada, has assisted more than 1,000
villages in Nagaland to develop and adopt new Agroforestry technologies and
production system. The members of NEPED on the basis of the Traditional
Ecological Knowledge of the villagers and observing the local ecology, firstly,
identified the locally grown native trees and trees suitable to the local environment.
Secondly, they encouraged the villagers to plant those native trees and exotic species
of trees that are suitable to the local environment as well as fast growing and provide
high quality timber and firewood. Thirdly, they encouraged the villagers to interplant
local shade-loving crops such as ginger, yam, turmeric, cardamom and pepper etc.,
beneath the trees for food, medicine and money income. And they helped the
villagers to find access to lucrative markets to sell the timber, firewood and crops.

Apart from growing trees along with the crops in their fields, the community of
Waromung and Khonoma has also started tree plantations in their Individual Land,
Clan Land and in waste land areas as well. Such initiatives have multi-purpose goals
like plantation of trees for timber and firewood, plantation to re-establish forest
Contributions by the Youth and Student Organisations for Conservation in Khonoma Village
cover, plantation of ornamental trees along the streets and village vicinity for landscape scenery and providing shades, plantation of fruit bearing trees because of its value as food and plantation of trees to prevent soil erosion, landslides and preserve water catchment areas. Moreover, the awareness of the important role of the trees and forest and its beneficial effects in their daily lives such as keeping the environment green and clean, supply of fresh air, maintaining the soil fertility, acting as water catchment area and providing clean water etc., has further facilitated in promoting such practices of tree plantations. As one of the respondents from Waromung stated, ‘in the past our land was covered with thick forest and there were plenty of trees, and we used to cut down trees, bamboos for all purposes and simply leave it like that. But now that we come to know about the value of trees and the various benefits we get from it, we are more careful while cutting down trees and we have also started planting trees in every place wherever there are open space’.

v. Role of the Youth in Land and Forest Management

The over-all change in their social, economic, religious, political and cultural life has led the Nagas to venture to the urban areas in pursuance of better education and new occupational opportunities. In this process many of them left their native village and settled in the nearby towns and even outside the state, as such most of those who migrated entrusted the responsibility of managing their agricultural land and other landed property to their families and kinsman. But over time, the younger generations are becoming aware of the importance of the environment and the significance of the land and forest in their social and economic life and are more environmentally conscious, and they have started taking initiatives to protect and
manage their land and forest. For instance, in Khonoma when the Green Village Project was launched the KYO and the Khonoma Student Union were active participants and volunteered in all the activities involved with the Project. When the prohibition on logging and hunting was enforced in order to conserve the environment of the village, the KYO was given the responsibility to check the defaulters and imposed fine on them. Even at present, the power and responsibility of monitoring logging and hunting activities in the village forest and punishing the defaulters lies with the KYO. At the same time, maintaining and keeping the surroundings of the village clean is managed by the Khonoma Student Union. At least once a week, on a selected day, students starting from Class V to Class X sets out to pick up the litters, sweep the village roads and clean the surroundings. As one of the elder Mr. Tsilie Sakhrie, one of the pioneers of Environment Conservation in Khonoma village stated, ‘the Youths are the “Magic of Success” of conservation in our village’.

Similarly, in Waromung also the younger generation are playing a proactive role in managing the land and forest. Many of the young people have migrated to the urban areas like Mokokchung, Dimapur, Kohima and outside the state for further education and to find employment. However, even though they are settled and employed outside, they have started taking initiatives to maintain farms and orchards, tree plantations and bamboo grooves in their land in the village. Every year during vacations the youngsters come to the village to clean, check and improvise their farms and plantations. They harvest the products such as firewood, timber and the fruits, after which they clear and clean the areas and plant more saplings, fenced it
properly to protect from the wild animals and make sure that the land and forest is not destroyed but utilised in a rational manner. And students from the Class IV and upwards cleans and sweep the village surroundings every alternate week. In addition, the Waromung Kaketshir Telongjem and the younger age-groups organised community social work to clean the streets, footpaths, rivers and streams, and plant trees in the village surroundings.

vi. Role of Education in Environmental Conservation

The conservation of land, forest and water through sustainable utilisation, keeping the environment clean has taken a central place in the education system in the context of global warming, climate change and environmental degradation. In tune with the ongoing changes, the schools in both Waromung and Khonoma village have incorporated environment-based activities in their extra-curricular activities. In Waromung, all the four schools- Yimrongmen Primary School, Yimsen Keyong Primary School, Waromung Compound Primary School and Waromung Compound Middle School has formed Eco-Club in the school. Similarly, in Khonoma also, all the schools- the Government Middle School, Government Primary School Thevoma, Government Primary School Semoma and Government Primary School Merhümä, Christian Welfare School and St. John Bosco School has established the Eco-Club. The Eco-Clubs are established under the Ministry of Environment and Forest, India to sensitise the young school students about environmental issues and to encourage them to take eco-friendly actions. Thus, the Eco-Clubs of both Waromung and Khonoma are registered under the Ministry of Environment and forest, which provides them with fund to undertake various environmental activities. Each school
has a teacher representative of Eco-Club and under his/her supervision the students undertake various environmental activities such as planting trees in their school compounds and around the village, collecting waste and cleaning the school and the village surroundings every week, visiting the forest and other important areas in and outside the village as field trips, organising programmes on World Environment Day and helping the old and the aged in their agricultural activities.

However, in both the village, when the teachers were asked whether they teach about the importance of the environment in their classes and the ways to create more awareness about the environmental importance among the students, they stated that they discuss about planting tree, preserving water, protecting the wild life, in relation to the topic they are teaching. And sometimes work together with the students on school projects based on land, forest, water, the flora and fauna and the biodiversity of the village. Except for such efforts by the teachers, environmental studies as a separate subject has not been introduced in the school curriculum, thus, there is a need to incorporate environmental education where not only the topics of environmental importance and awareness, it preservation will be included but also the Traditional Ecological Knowledge of the community and its applicability, Traditional practices of land, forest and water management, information about the local flora and fauna and the local ecology can also be part of the syllabi.

vii. Joint Venture of the Community and State Agencies

One of the most important tasks for the government of Nagaland after the establishment of the State and its administration was the management of the land, forest and its resources, as these natural resources are considered as the richest
wealth and the most valuable assets for the progress of the state’s economy and the improvement of the people’s livelihood. However, the ownership of land among the Nagas being such that the land is owned by the communities and individuals, the government has no authority over its management and utilisation. But with the cooperation and active participation of the communities, the State government of Nagaland has successfully implemented its programmes and policies to protect, conserve and restore their land, forest and the natural resources. Department of Horticulture, Department of Agriculture, Department of Forest, Department of Land Resources, Department of Soil and Water Conservation, Department of Rural Development are some of the governmental departments that are actively involved in working towards the better management of the land, forest, water and natural resources in the rural areas and through such efforts tries to enhance better living conditions and livelihood of the villagers. These departments take initiatives such as distribution of saplings and seeds, implementing and funding various projects such as constructing water tanks, dams, irrigation channels, road, culverts etc.

One of the noteworthy community-state venture programmes for managing and preserving forest is the Joint Forest Management Programme. The Joint Forest Management (JFM) was started in Nagaland with the Government Notification No. FOR-153 (Vol-II) dated 05.03.1997 (Annual Report 2015-16: 21), with the following objectives-

i. To elicit active participation of villagers in (a) creation (b) management and (c) protection of plantation;

ii. To achieve ecological needs consonant with sustainable productive Forestry;

iii. To create forest-based economy for the people.
In order to achieve the above mentioned objectives, the state government has constituted a State Level Working Group and Village Level Community Forest Committees (CFC) in order to implement Scheme(s) under the JFM. Thus, under JFM, the State Government along with the participation and cooperation of the local communities manage, develop and protect the forest through regeneration of the degraded forest and increasing the forest and tree cover and jointly shares the forest produce profited through the JFM with the communities. Such community-state venture programmes have helped in preserving the forest as well as aided in improving the livelihood opportunities of the communities involved.

Apart from the JFM Programme, some of the notable Community-State venture initiatives carried out in Waromung village are:

a. Bamboo Plantation Project in 2008 under the Forest Department Project
b. Sacred Groove Conservation of Janjanglong area in 2009 under the State Forest Department.

c. Tree plantation in Chakrang Min area which was started in 2012 under the JFM Programme and will be carried forward for a period of 5 years.
d. Community Biodiversity Conservation Project in the Natotsu Tenem area was started in the year 2014 under the State Plan 13th Finance Commission Project.

However, in Khonoma, apart from tree plantations in some community and individual land under JFM Programme, not many governmental projects have been implemented as the community themselves has taken the initiatives to manage and conserve the land, forest and environment by themselves.
viii. Impact of Population Growth and Migration

Population growth and migration has resulted in clearing of large areas of forest land for settlement and for cultivation purposes, thereby decreasing the forest areas as well as leading to land fragmentation due to division of the land among the family members. This is primarily noticeable in the urban areas like Kohima, Dimapur, Mokokchung etc., and those villages that are adjoining to the urban areas. Kohima village is an example where most of the village land has been sold or donated to build the infrastructures for setting up the state capital. In addition, the migration of people from the rural areas and small towns to the state capital for education and employment, which means the need for more space for accommodation, has led to a trend where leasing out house for rent has become a lucrative source for income. This has resulted in mushrooming up of buildings everywhere in Kohima where even those areas which had good forest areas have been replaced by an urban landscape.

However, the extent of the impact of population growth, migration and commodification of land varies from place to place. For instance, in Waromung and Khonoma Village, the scenario differs from the urban settings. In Waromung, the villagers are planning to establish a new settlement, an off-shoot of their village within the Village Land itself. The Waromung Village Council has notified that those villagers who are willing to settle in the new village would be given land free of cost for settlement and cultivation. But this proposition will be valid only for those settlers who come forward within the given time period. The Council members and the villagers stated that the decision to establish a new settlement was taken in the
Yim Mungdang (Village General Meeting) after consultation among the village elders, Council members and all the citizens of Waromung village (i.e., those from the village as well as those who have settled in the towns and other places outside the village). They stated that the decision was taken on the basis that Waromung has enough area of Village Land where the villagers can establish new settlement. And instead of simply leaving it unutilised, the settlers along with the help of the villagers can develop the area. Apart from the vast land areas of Waromung village preserved by their forefathers during the establishment of the village, one of the reasons for the availability of sufficient land in Waromung was because of the migration of the villagers to the urban areas like Mokokchung, Kohima, Dimapur, etc., for education and for employment. Once they complete their studies, they try to find employment in the urban areas and settle down there and visit their native village during the vacations only.

In Khonoma village also the villagers mentioned that as far as land is concerned there is enough area of land for the villagers. However, here there is a reverse trend because instead of the villagers migrating to the urban areas, the villagers who were working in the urban areas but are already retired now are returning back to the village. And even those who are employed outside wants to come back after their retirement or at least build a house in Khonoma. The villagers stated that the reason why many of the villagers want to return to Khonoma is because in the urban areas like Kohima and Dimapur it is very difficult to buy land because the price of land has become very expensive due to the scarcity of land, whereas, in Khonoma, the villagers can settle in their own family, lineage or clan land or even buy land if they find a willing seller. Moreover, because of the easy accessibility from Khonoma to
Kohima and Dimapur, Khonoma’s healthy environment and its acclaimed name with many possibilities for new avenues, people prefer to settle back in Khonoma. They also mentioned that once the road construction connecting Khonoma and Kohima is complete, transportation and communication will improve and the village will be more accessible and development will take place at a faster pace. Being aware of all these advantages many of villagers are returning back and constructing house in their native village. They also mentioned that even many outsiders wishes to settle in Khonoma and inquire if they can buy land in Khonoma but such practice is not possible because it is not in their custom to sell away their land to those who are not from Khonoma village itself.

Thus, in Waromung and Khonoma, though the trend differs, as far as land is concern, the problem of land scarcity within the village is absent. However, in Khonoma, scarcity of land in the urban areas is having an impact because most of the villagers are returning to settle in the village after their retirement as it is very difficult to buy land in Kohima and Dimapur. As of now, the two villages have enough area of land, nonetheless a careful assessment should be taken and plan accordingly to avert the likelihood of large scale deforestation for need of land. Because the new settlement in Waromung means land for settlement and cultivation, this would lead to clearing of the forest land as the settlement area and population increases later. Similarly, in Khonoma also more returnees means the need for more land which would result in the clearing of the family, lineage, clan or village land and forests.
ix. Changing Land Relations

The Nagas are dependent on the land and natural environment in which they live and work, as such it is considered as one of the most important resources. Besides, as mentioned in the beginning, the significance of land for the Nagas goes beyond the material and utility value, as it is ‘intimately bound up with their cosmologies and identities as communities, and as people’ (Colchester quoted in D’Souza 2005: 13). They consider their land as a symbol of their identity and unity that holds the family, clan and tribe together (Longchar 1995: 71). Even the traditional religious system of Nagas was centred around the world of nature with the belief that the land, forest, trees, rivers, mountains and hills were the abode of the spirits which they appeased for the well being of all creatures on this earth. Thus, land was considered a sacred space and today, even after their conversion to Christianity the sacred nature of the land is still upheld by the Nagas.

Such close association have led the Nagas to have certain belief in relation to the land. They have a believe that it is the land that provides them with shelter and if they toil hard on the land it will bestow them with enough provisions and wealth to sustain their family needs and even to extend it to the neighbours, friends and villagers. They believe that a person who toils and sweat on his land will become a rich man but the one who does not take care of his land will be a poor man. Thus, a person with land is regarded as rich and wealthy because he/she will never have to beg from another for his/ her needs. They also believed that the land should be treated with respect otherwise the person who treats it with disrespect will face poverty, sickness and failures in life. They also have a saying that a person who
becomes greedy in matters of land and tries to claim what is not rightfully theirs will have a troublesome death. Another belief associated with land is that land always reveals the truth, which is why whenever there is a dispute and none of the parties involved is willing to accept the verdict of the Village Council or the higher court, they resort to the swearing of oath by swallowing some amount of the soil from the land. After taking the oath, the individual/party who first encounters any accidents or misfortunes is declared as the guilty one. The Nagas believed that any person who gives false oath and found guilty will be cursed and even his children, grandchildren and the future generations will be cursed by the land. So anyone who takes such an oath has to speak the truth or face the consequences. And such kind of oath is taken only as a last resort. All such beliefs are followed even to this day and the land is held in reverence by the Nagas. But on the other hand, commodification of land, privatisation of common land, land fragmentations are emerging on a high proportion among the Nagas.

a. Land Transactions: The land being one of the most useful resource and a valuable property, the Nagas have a practice of never selling their land to any outsiders, i.e., non-Nagas. Buying and selling of land in the village takes place only among the members of the same village and in the urban areas among the Naga communities only. As far as land transaction is concerned in Waromung and Khonoma village, majority of the villagers are not willing to sell their land. Table: 35 indicate the opinion of the respondents from both Waromung and Khonoma village regarding the selling of land.
Table: 35 Opinion regarding willingness to sell Land and Forest in Waromung

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Responses</th>
<th>No. Of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yes</td>
<td>02</td>
<td>02%</td>
</tr>
<tr>
<td>2.</td>
<td>No</td>
<td>94</td>
<td>94%</td>
</tr>
<tr>
<td>3.</td>
<td>Can’t say</td>
<td>04</td>
<td>04%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>


Table: 36 Opinion regarding willingness to sell Land and Forest in Khonoma

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Responses</th>
<th>No. Of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yes</td>
<td>04</td>
<td>04%</td>
</tr>
<tr>
<td>2.</td>
<td>No</td>
<td>96</td>
<td>96%</td>
</tr>
<tr>
<td>3.</td>
<td>Can’t say</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>


According to Table: 35, in Waromung, 94 per cent of the respondents are not willing to sell their land away, only 2 per cent of the respondents are willing to sell their land and 4 per cent were indecisive about it. Whereas according to Table: 36, in Khonoma village 96 per cent are not willing to sell their land and only 4 per cent are willing to sell their land. Majority of the respondents stated that selling away their
land would be the last resort, and they will take such measures only in case of extreme need such as in case of emergency medical need, children’s further education or unavoidable circumstances. Most of them expressed that they would rather borrow money than sell their land. In fact, many of the respondents stated that if they have enough money they would like to buy more land instead of selling it. They also mentioned that the question of selling away their land does not arise because the land is the only ancestral heritage which they could bequeath to their children and grandchildren; as such they have to preserve it for the future generation. Thus, the land being the most valuable property for the Nagas, most of them are not willing to sell it away. Instead many of them want to procure more plots of land as their possession.

However, though the traditional land transaction pattern is still maintained among the Nagas in the rural areas, in urban areas like Dimapur and Kohima etc., such practices are no longer followed and there are many nonlocals owning large tracts of land in these areas. One of the main factors for such land alienation is the commodification of land due to the high market value. Another factor is the inter-marriage of the Nagas with the non-locals, especially when the daughters marry a non-local; the parents give their son-in-law and daughter a portion of their landed property.

b. Privatisation of Land: Commodification of land, practices of transferring the community land to individuals, monopoly over land by certain section of the community, acquisition of land by the military forces and by the state government for development activities are some of the factors that has led to the privatisation of land among the Nagas. One of the main factors that led to the privatisation of
land is the commodification of land due to its high market value. Such instances are more visible in urban areas of Nagaland where the scarcity of land combined with the commodification of land has led to the high price of land. Also, the Naga practice of allotting the community land for residential and cultivation purpose to the individuals/ househoulds which over the generations gets converted into the individual’s property has led to the privatisation of the community land. Another factor is the monopoly the wealthy and the powerful have over the land, where they purchase large area of land from the community for their personal purpose. This has not only resulted in the privatisation of land but also brought about differences among the communities, where some individuals possess large tracts of land then the rest. The acquisition of the land by the state police, the armies and paramilitary forces has also led to the problem of alienation of community land. And the acquisition of land for development projects and programmes by the government and development agencies has resulted in the alienation of the community from their land and livelihood as well.

RELATIONS BETWEEN COMMUNITY AND GOVERNMENT IN MANAGEMENT OF FOREST

The State Government of Nagaland being responsible for the over-all welfare of the state introduced various programmes, policies and project for the development of the state. Land and forest being one of the richest natural resource of the state, the state government took various measures and steps for its development and management. However, in Nagaland the land and forest being owned privately by the community or by the individuals, the government has to acquire land for various
purpose such as building infrastructure, keeping reserved forest or wildlife sanctuaries or land plots for implementing programmes and projects by either buying it from the owners or use the land donated by the community. Though majority of the individuals and villages are willing to donate their land and forest for various developmental purposes, yet, when it comes to the responsibilities and management of land and forest they are reluctant to trust the government over such matters. The table below indicates the opinions of the villagers from Waromung and Khonoma village regarding the State Government’s role in the management of land and forest.

Table: 37 Opinion regarding State Government’s Role in Land and Forest Management

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Conditions</th>
<th>Name of the Village</th>
<th>No. of Respondents</th>
<th>Percentage</th>
<th>Total Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Willing to allow Government involvement in the management of land and Forest.</td>
<td>Waromung</td>
<td>06</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khonoma</td>
<td>NIL</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2.</td>
<td>Is not at all willing for Government involvement in the management of land and Forest.</td>
<td>Waromung</td>
<td>48</td>
<td>48%</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khonoma</td>
<td>90</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>3.</td>
<td>Willing for Community and Government Joint management of land and Forest.</td>
<td>Waromung</td>
<td>46</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khonoma</td>
<td>10</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

An assessment of Table: 37 indicates that in both Waromung and Khonoma village majority of the respondents are not willing to let the state government take full responsibility in the management of land and forest in their respective village. In Waromung, at least 6 per cent of the respondents are of the opinion that some portion of the land and forest can be donated to the government with full responsibility to utilise it for establishing institutions, offices or maintaining reserved forest for conservation purposes because this might bring progress to the village. But in Khonoma, none of the respondents are willing to donate land and forest to the government with full responsibility. The villagers of Khonoma pointed out that in the past most of the government’s programmes initiated in the village did not bring much of positive results and now that the community themselves have successfully conserved the land, forest and the environment, the involvement of the state government is not at all necessary.

On the other hand, 46 per cent of the respondents from Waromung and 10 per cent of the respondents from Khonoma stated that they would be willing to let the state government get involved on the condition that the management and administration of the land and forest donated to the government by the village/clan/individual should be shared between the community and the government. They were of the view that the state government should recognise the landowner’s right and employ the villagers in the offices, institution established in their village. Particularly when it comes to agriculture, land, forest, wildlife management the villagers specified that instead of employing outsiders who does not have much knowledge about the local land and environment the government should employ the local community as they are the ones who lives there and have...
knowledge about their land and forest. They also mentioned that after some years of managing jointly, when the villagers are well-trained under the supervision of the government officials and capable of running the programmes and projects by themselves, the government can hand it over to the villagers to manage it by themselves.

However, majority of the respondents from both the two village, 48 per cent from Waromung and 90 per cent from Khonoma stated that it would not be wise to give total authority to the state government to manage the donated land and forest. The reasons stated by the villagers are-

i. Allowing the government to manage in their land whether it is a large area or small area, is akin to giving away their birthright in their own land. Because once it is taken over by the government, there will be many prohibitions and restrictions imposed by the government, their rights to the land will be restricted and they will have to take permissions like outsiders even if the land and forest is within their own village.

ii. Insincerity of the government was also mentioned by the villagers. They mentioned that the government programmes and projects were not properly implemented and the full amount of funds was hardly received. And also mentioned that the conditions of many reserves areas under the government have become worse than it was before. The respondents cited the example of Intangki National Park in Peren district, Nagaland which was a home to rare species like hornbill, elephants, Black stor, Mithun, Hoolock, gibbon, Barking deer, tiger, Sloth bear, pheasants, clouded leopards and Flying squirrel etc., have now become a haven for encroachers, poachers and illegal logging activities. Because
of the negligence of the forest officials and forest guards who are supposed to protect the sanctuary but are rarely present many such illegal activities are taking place as a result of which many of the rare species are becoming extinct and there is a large scale degradation of the sanctuary environ.

iii. The respondents also mentioned that the government agents who were supposed to protect the reserve areas and the wildlife are the ones involved in destroying it by indulging in illegal logging, poaching, taking bribes from those who are engaged in these illegal activities and are working together with the offenders.

iv. Another reason given by the villagers was the officials and agents are mostly outsiders who does not have much knowledge about the local ecosystem, the land, forest and culture and practices related to the these systems, but comes to the village and implement those programmes and policies even if it is not suitable to the local environment and practices.

Thus, the villagers distrust in the state government due to the government’s insincerity, corruption of the officials, indifference to the local environment and practice and the apprehension of losing their rights in their own native place made the villagers doubtful of the government’s involvement in their affairs, especially with regard to their land and forest.
Photograph: 31 Foundation Stone of Khonoma: The Green Village
COMMUNITY INITIATIVE FOR FOREST AND ENVIRONMENT CONSERVATION- KHONOMA: THE GREEN VILLAGE

Many of the Naga communities have started to take initiatives to conserve and protect important areas within their village vicinity to conserve the biodiversity of the village. Khonoma- the Green Village is one of the success stories based on such community initiatives taken by the people of Khonoma to conserve their forest and environment. The substantive groundwork for Khonoma- the Green Village was laid down by the community of Khonoma themselves when they started conserving their environment and resource rich forest to safeguard their natural heritage. The first step was taken with the imposition of total prohibition on logging in the year 1996 to stop the large scale logging which was threatening the timber resource base of the village. Next was the establishment of Khonoma Nature Conservation and Tragopan Sanctuary (KNCTS), in 1998 by the ecologically conscious community of Khonoma to protect the endangered Blyth’s Tragopan and other wildlife and rare plant species in the village which was funded by the Gerard Duran Trust, U.K. Later, they enforced total prohibition on hunting in 2000, which was met with heavy resistance at the beginning because many of the people were dependent on it for their livelihood.

The extent of how much the villagers were dependent on logging and hunting for their livelihood can be comprehended from the following statement of one of the active member of conservation who mentioned that, ‘before the implementation of total ban on logging and hunting, on an average around 2000 CFTs of timber from Khonoma reached Dimapur everyday as the timber from Khonoma was of good
quality and there was a high demand for it. And because there was large scale unemployment in our village, many of the unemployed youths started engaging in the logging business as this was the only means for them to earn their livelihood. Moreover, it was a very lucrative business and those who were engaged in this business were progressing and bought two-wheelers as well as cars, music systems, Television sets, started building houses etc’. The respondent also stated that ‘earlier our village came to such a position that we became famous for hunting. Even children went to the forest with air-guns in the morning and return back late in the evening with hundreds of birds and animals that they had hunted in the forest. In fact, the Supermarket in Kohima was filled with wild animal meat from our village’. It was also mentioned that in a year more than 100 air- guns (which was usually used for hunting) were bought by the people from Khonoma from the gun dealers in Kohima. Besides, the people of Khonoma celebrate a festival called Ngonyi which is related to hunting. During Ngonyi, the girls goes for fishing and the boys goes for hunting, and later in the evening they gather all the fishes and wild games they have collected that day and share it among themselves and give it to the elders of the village. Basing on all these practices the villagers started opposing the prohibition on hunting saying ‘hunting is our tradition. It is a sport’s for us’. Consequently, there was much opposition, arguments, clashes and there was even Underground militant intervention as they used to receive tax from the log business. Some of the youth (around 300 youths) who were engaged in logging business and against the total prohibition on logging even left Khonoma and went to Dzuliekie, which is an off-shoot of their village and reorganised themselves into a group known as Dzuliekie Youth Organisation. However, after several meetings, consultations and conducting
awareness programmes about the benefits of conservation, the whole community agreed to the total prohibition on hunting and logging.

It was not just about the decision to prohibit logging and hunting, but rules and regulations were made and further steps were taken to enhance the practicability of their conservation effort. Since the implementation of total prohibition on logging for commercial purposes in 1996, to further reduce the felling of trees on a large scale, the villagers were allowed to cut down trees only for their basic necessities, such as for firewood and timber for house construction. And in order to prevent further deforestation, every household is permitted to cut down only one trip (1 trip= four rows of wood of 6x6 feet and 2.5 feet deep, and one row of 6x3 feet wood) of firewood per year from the Village Community Forest. Moreover, if any of the villagers needs timber for house construction from the Village forest they have to submit an estimate of the house and accordingly the Village Council or the *Catsu Kuotsu Merhü* Action Committee allots them the number of trees for the construction. The Council also maintains a file where they keep a record of the names of individual, number of households to keep a track of those who have already been granted the permission to take timbers from the Village Community Forest for house construction. Further, they have started to plant more trees, especially the *Khel* youths, the Student Union and the younger age-groups have started to plant trees on the side streets, in and around the village vicinity and on the road sides leading to their village.

Hunting as an activity was a good means of income for the villager because there is a high demand for the wild games which is considered as a delicacy and is also utilised for its zoo-therapeutic property by the Nagas. Moreover, hunting was
considered as a traditional sport by most of the Nagas, thus it was an integral part of their life. All such factors combined with no measures to restrain the excessive hunting, lead to rampant hunting which resulted in the rapid decrease of the wild life population and many rare and endangered species were killed in the process. Initially, the people were concerned about the large scale killing of Blyth Tragopan, an endangered pheasant which was found in plenty in Khonoma, so they decided to prohibit the hunting of the pheasant in their village and in the year 1998, the community established the Khonoma Nature Conservation and Tragopan Sanctuary which covered about 70 km² of the forest area. Later on, the leaders together with the community held talks and meeting to stop the indiscriminate hunting. At the initial period, hunting was restricted and allowed for 15 or 20 days during the hunting season (December-March), but it has its consequences as after many months of conservation, everything was hunted down during the 15-20 days relaxation. So the leaders along with the community held discussions about the problem and decided to impose total prohibition on hunting. However, there were oppositions because as mentioned above wild games were part of their diet, it was deeply connected to their culture and for some of the villagers hunting and selling the wild games was the only source of livelihood. But after many discussions and negotiations to find alternative means for those who were dependent on hunting, they came to a consensus and in the year 2000, total prohibition on hunting of wild life in Khonoma village area was imposed by the Khonoma Village Council.

They also made rules and regulations to penalise the offenders and the KYO was entrusted to implement these rules and impose fines whenever necessary. According to the rules laid down, if anyone is caught hunting, whether alone or in
groups, each person has to pay an amount of Rs.3000 if they are from Khonoma and for outsiders they have to pay Rs.5000/- as penalty and their guns will be ceased. And out of the sum of Rs.3000, Rs.1000 is given to the reporter who reports about the illegal hunting, Rs.1000 to the Khel Youth of the reporter and Rs.1000 is kept by the KYO. This is done so as to encourage people to report honestly and the Youths to be stringent in regulating the hunting prohibition. Even children were not exempted, if they were seen with sling-shots or caught hunting with it, they are fined Rs.100. ‘This was done not as a punishment to them but to inculcate the importance of conservation and a sense of responsibility to care for the environment among the children from a young age’.

But an ordeal faced by many of the farmers was the destruction of the crops by the wild animals. In order to deal with this problem, they made a regulation to allow the farmers to kill the animals after they take permission from the KYO, but they were not allowed to sell the games killed in their field. This was done so as to discourage the villagers from taking advantage of the permit given to them to kill the wild animals. In addition, in order to prevent the people from taking advantage of the permission allotted to them, they have to make a list of the animals that is destroying their crops and have to shoot only those animals that they have written on the list, if they shoot any other animals, even if by accident, they will be fined by the KYO. The KYO permits them specific number of days according to the type and number of animals that have been listed as destroying the crops and within the given period they have to hunt down the animals.

The question of the practicability of imposing the total prohibition on hunting and how to enforce the regulation was raised. The village leaders, Khel Unions,
Youths along with the rest of the community decided to make a register with a written pledge that ‘every person and family gives their assurance not to hunt anymore and abide by the rules and regulations of the village and give their level best to protect their environment’. One register each was circulated in the three Khels and another register was circulated in Dziliekie which is an off-shoot of the village, where the head of every household signed on behalf of himself and his family to abide by the pledge and to face any consequences if the rules were broken. And in 2011, on the Decennial Celebration of Successful Conservation, the registers were brought, and the Youth President of every Khel along with the President of KYO read out the agreement, and made the pledge to conserve the forest and signed the declaration.

At the outset, the Khonoma Village Council supervised all the matters of prohibitions on hunting and logging but with many official duties and responsibilities to attend to, it was difficult for the members to keep a daily check on the activities and there were instances of people still carrying out hunting and logging in the village. So, the Village Council members and community held meeting and decided to give the responsibilities to monitor the illegal activities to the youths because the youths were the main infiltrators and if they were given the responsibilities they themselves have to first stop from such activities in order to control the others who were illegally carrying out logging and hunting. As one of the respondent said, ‘it is like the hunters being hunted’. Thus, the power to check and monitor the activities of illegal hunting and logging was handed over to the KYO. And on 15th February 2001, the whole forest of Khonoma was officially declared as fully conserved. Further, to enhance their conservation effort, the people of Khonoma send official
notice to the neighbouring villages, newspapers, various organisations and put up notice board about the prohibition on hunting and logging in Khonoma and the penalties that entails if any individual is caught committing the offence within the vicinity of Khonoma village. Apart from prohibition on logging and hunting, the villagers of Khonoma also took up other initiatives to maintain their environment. Some of the initiatives are-

a. **Restriction on collection of Forest Produces for Commercial Purpose:**

Khonoma has plenty of wild vegetables, fruits, herbs, plants with medicinal and aromatic values and wild flowers, which were collected and sold by the women. But in order to conserve the flora of the village, the community decided to impose a restriction on such commercial activities. The villagers are allowed to collect the wild leaves, vegetables, herbs etc., for their own personal use and they are allowed to send it to their relatives and friends staying outside the village but selling of the forest produces within and outside the village is strictly prohibited. The only wild product that is allowed to be sold commercially is the wild apple, for which Khonoma is well-known. The villagers mentioned that since the wild apples are found in plenty in the forest, if they do not utilise it would just rot away and be wasted. So the villagers, mostly women and children collect it from the forest, preserve it in the form of pickle, jam, dry it with sugar and salt, make juice and sell it in the market. And for many of these women and children it is a very good source of income for them. In addition, many of the villagers have started to preserve the wild plants and vegetables, medicinal plants and herbs by planting it in their own jhum fields and in their homesteads as well.
b. Prohibition on use of chemicals in the fields and rivers: Organic farming is a practice which the people of Khonoma have been following since the time of their ancestors. Khonoma is well known for their traditional agriculture system of Alder based Jhum cultivation and Terrace fields for wet paddy cultivation. The Alder tree (*Alnus nepalensis*) restores the fertility of the soil by fixing atmospheric nitrogen into the soil with its roots nodules and it also enhances the crop production and reduces soil erosion. The people of Khonoma being aware of the many benefits of the Alder tree have evolved a system of managing their jhum field by planting the Alder trees in their fields and surroundings. This has helped them to sustainably cultivate the land without degrading the land and forest, and in addition, their firewood requirement was met from the alder trees grown in their fields and this has greatly reduced the pressure on the forest and has helped in conserving the forest. Thus, it has contributed to a greener environment, ample supply of clean water, fertile soil and less soil erosion in Khonoma. Even at present, the community follow their traditional method of cultivation and use of chemical fertilizers and pesticides are discouraged. They also strictly prohibit the use of chemicals and explosives during fishing, instead bamboo traps and fishing nets are used for catching fish.

c. Use of solar light: In order to save energy, solar lamps were distributed to every household in the village. And instead of using electric lights, they have fixed solar bulbs on bamboo posts to light up the village streets.

d. Maintenance of Incinerator: All the three Khels in the village has an incinerator each where they collect the waste materials and burn it off.
e. **Keeping dustbins all round the village:** All round the village surroundings, the community have kept dustbin made of bamboos and other eco-friendly materials. And every household in the village maintains dustbins to dispose the household waste. A notable practice in Khonoma is that even the children as young as 4-5 years do not simply throw away the sweet covers or papers here and there but throw it in the dustbins and if there is no dustbin around, they keep the covers and papers with them and throw it away when they come across a dustbin. Also if they see any waste like sweet covers, papers etc., littering in the streets they pick it up and throw it in the nearby dustbins.

f. **Sanitation Drive:** The Khonoma Student Union has taken the initiative to clean the village surroundings at least once in a month. Thus, in the early hours of the selected day, all the students, starting from Class V to Class X, sets out to clean their surrounding, pick up the litters and sweep the village street etc. Also the Khonoma Women are actively involved in creating awareness about sanitation in the village and takes initiatives and support the activities to conserve the environment of the village.

Such Conservational Approach initiated by the community was appreciated and different organisations like Aaranyak Guwahati, Bombay Natural History Society, Center for Environment Education Ahmedabad, EQUATIONS Bangalore, Kalpavriksh Pune, Nature’s Beckon, NE India and Nagaland Empowerment of People through Economic Development extended their assistance to the people of Khonoma in their effort to conserve their environment. The Union Ministry of Tourism and Culture of India recognising the potential of the Conservational
Approach of the Khonoma community decided to promote eco-tourism in the village and in the year 2003, granted the villagers an amount of rupees three crore for the Green Village Project through the Tourism Department of Nagaland. The fund was utilised by the villagers ‘to start a tourism initiative, to provide basic civic amenities and hygienic measures, reinforce community infrastructure and prepare the village to receive and showcase to visitors its past and its present’ (Broome and Hazarika 2012: 87). The rich biodiversity of the village, the flora and the fauna and the prominent topographical features of the village were also documented as an undertaking of the Green Village Project. The Khonoma Tourism Development Board along with the villagers and with the help of a team of experts from various fields also carried out an Environmental Impact Assessment in order to have a proper understanding of the bearings that eco-tourism will have on the local population and the local environment and to strengthen the capacity of the local community in various sectors based on the assessment. The active participation of the community in the conservational effort along with the support of the NGO’s and the government resulted in the productive outcome of the Green Village Project and in October 25, 2005, Khonoma was inaugurated as the first ‘Green Village’ in India by the then Chief Minister of Nagaland, Mr. Neiphiu Rio. Thus, Khonoma-the Green Village is a model village for many communities in the country as well as outside India.
iv. **Challenges and Opportunities**

The success of the conservational effort of the Khonoma community was not without any obstacles. It has its own set of problems and challenges, at the same time it opened up new avenues and opportunities for the community. Some of the challenges faced by the Khonoma community were-

a. **Question of Livelihood**: For many of the villagers logging business, hunting, collecting and selling of wild products was the main source of income which they utilise for their children’s education, medical bill and household expenses etc. Under such circumstances, they have to deliberate over the question of the alternatives means of livelihood to which they could recourse to once all these activities were stopped. The community decided that whatever opportunities comes the first preference will be given to those who have to give up their hunting and logging activities. Thus, scheme for opening dairy farms and other projects were given to those who hunters and loggers who do not have any other means after the activities were prohibited.

b. **Opposition from within the community**: As many of the villagers were dependent on hunting and logging, there was strong opposition against the total prohibition on logging and hunting. Especially many of the unemployed youths of Khonoma were engaged in the logging business as they have no other means and logging was a good source of earning for them so they were totally against the prohibition on logging. Some of them even went to the extent of leaving Khonoma and forming an organisation in Dzuliekie, which was an off-shoot of
Khonoma village. Such oppositions were a hindrance to their conservational effort.

c. **Conflicts:** The difference in opinion about the total prohibition on hunting and logging, the opposition against it lead to division among the people of Khonoma and ‘it nearly destroyed the village’. Meeting, consultations of the leaders and community were disrupted by those who were against the prohibitions on logging and hunting. During this time ‘there were continuous heated arguments among the villagers everyday’.

d. **Militant Intervention:** There was intervention from the Naga underground militants as they used to receive tax from the logging trade, which will be stopped once logging is prohibited. This became an issue of ‘outsider’ interfering in the internal matters of the village, which was a threat to the community bond which held the village together.

e. **Controlling the Prohibited Activities:** Even after the community decided to prohibit logging and hunting, there were still few individuals who tried to carry on these activities illegally. There were also cases where even after they were caught red-handed, some of them were not willing to pay the fines. Such rebellious actions and controlling it was a challenge they have to deal with for their conservational effort to be successful.

In spite of all these difficulties, the people of Khonoma were successful in their endeavour to conserve their environment because of their strong community solidarity. Many of the individuals who were actively engaged in logging and hunting decided to give up their activities and support the community conservational
effort because ‘it was for the good of our community, for our village and for the future generations’. There are instances of people leaving the village in search of new means of livelihood ‘instead of staying back and breaking the rules and bringing bad name to the village’. Here, the needs of the community, society and the village took precedence over their individual needs because ‘since the time of our ancestors, we lived and shared together all our failures and success, and the unity and progress of our village is more important than our individual accomplishment’.

Besides, meetings and consultations were held to create awareness among the people about the advantages of the conservation and convince them to give up those activities that would result in the destruction of their environment. Moreover, the retrospection on their traditional practices which was based on nature and preservation of the natural resources, the practices and wisdom of their ancestors which made it possible for them to live and enjoy in their land now, was a strong base for them to resort back to the conservational activities. All these factors along with the determination of the community to conserve their village environment made it possible in the success of their conservational endeavour. And the success of their conservation led not only to a safer, cleaner and richer environment, it also opened up new avenues and opportunities for the people of Khonoma. Some of these were:

i. **Green Village**: With the naming of Khonoma as the first Green Village in India, Khonoma became an eco-tourist village where tourist and researchers visited the village everyday of the year. This opened up new contacts with outsiders and many new ventures.
ii. **New Economic avenues**: Agriculture and government employment is not the only option for the Khonoma people any longer. Home Stays to host the guests, youngsters working as tourist guide, plying taxis from Kohima to Khonoma, cultivation of cash crops, marketing their traditional products to the visitors are some of the new economic activities through which they are earning their livelihoods.

iii. **Improvement in Village Infrastructure**: Khonoma village was granted rupees three crores for the Green Village Project and this amount was utilised by the villagers to construct roads, footpaths, culverts, waiting sheds, installing solar lights in the village streets and distributing solar lamps to the households etc. Thus, there was an over-all infrastructural improvement in Khonoma. It also provided employment to the villagers as all the development activities were carried out by the villagers themselves and the workers were paid from the project money.

iv. **Rejuvenation of their Traditional practices and Culture**: It also gave them an opportunity to revive their traditional practices of preserving their natural resources and using it sustainably. Documentation of their festivals, folklores and Traditional Ecological Knowledge, names of flora and fauna found in Khonoma and their usages was another benefit for the villagers. And it also gave them an opportunity to showcase their tradition and culture to the outside world.

The strong determination of the Khonoma community to conserve their environment, their courage to risk everything even the means of their livelihood for the good of the community and their environment, is a story to be upheld in
mankind’s history. Even now, it has its own challenges such as the struggle to ensure that the benefits reach every stakeholder as there are claims that only a few get the benefits. The community are also struggling to find out ways and means to sustain their conservational initiatives and alternative livelihood. Here, the Government, NGO’s and various organisations can give them logistic support, financial aid and support in various ways. However, in spite of all these challenges, the community initiative to safeguard their natural heritage should be lauded as the outcome of the environment conservational effort of the people of Khonoma was a better, greener, and richer environment for their village. In addition, it has consequential impact in their social and economic life. The success of their conservational effort itself highlights the strong community bond of their society. The debates, oppositions, discussions, resolutions with regard to the conservation issue also show the underlying social mechanism of rationally resolving conflicts among the community and the social cohesion that upholds the community in times of crises. Khonoma village became a tourist attraction because of their green, clean environment and their conservational activities. It also brought about new economic avenues for the people. Moreover, it gave them the opportunity to revive many of their traditions and showcase their tradition and culture to the outside world. Also, the active involvement of the women in the conservational activities of the village gave them an opportunity to contribute to their community, at the same time it empowered them by uplifting their economic life and enhancing their social status. And the role played by the Youth and the responsibilities given to them in monitoring the conservation activities of their environment has placed them in a significant position where they have a crucial role to play and contribute for the community and for the future of the
village. And most importantly, Khonoma entered the annals of the environment history for their conservation effort and earned the name -the first ever ‘Green Village’ in India.