CHAPTER – I

INTRODUCTION
1.1 INTRODUCTION

Forests are not only essential for ecological balance of an area but they are also an important component of our natural environment and a source of various resources. They also play an important role in enhancing the quality of environment by influencing the life supporting system. Apart from providing direct use values, forests provide numerous environmental benefits such as watershed protection, nutrient cycling, pollution control, micro-climatic regulation, carbon sequestration, etc. The valuable forests resources are under great threat due to various forms of degradation. In fact, degradation of forests could become a major constraint on future growth and development in most of the developing countries like India. The real costs of such degradation are increasingly felt in terms of declining productivities of interlinked natural resources such as land, water, grass lands, etc. Though, the impacts in terms of loss of production are not realised at the macro level the problem is of very serious concern at the regional level.

The forests of the world, particularly of the tropical zone (where the study area is located) have been degraded rapidly which has created one of the most burning environmental problems in the present day world. Degradation of forests is one of the outcomes of various developmental activities having the character of extensional development and it is true that degradation is a havoc wreaked by thoughtless destructive activities of development. A forest clearing was made not only for village settlement but also for cultivation and pastures. With the increase of human population more and more forested area is cleared for various uses. Commercial exploitation of forests is also the main causes of degradation of forests. The world's tropical forests are disappearing faster than ever. Every succeeding study shows a startling acceleration of the process. For many years the baseline figures accepted for rates of degradation of forests were those prepared by the Food and Agriculture Organisation (FAO) in 1980. The study demonstrated that, globally, the total loss of forest cover area was proceeding at some 1,14,000 square kilometres per year. Therefore, degradation of forests has now become one of the most
challenging problems throughout the world. Each year, over 4 million hectares of virgin tropical forest are harvested and becoming ‘Secondary Forests’ (Melillo et al. 1985). Some process of forests degradation has been going on in Northeast India, which can still boost for its large tracts of virgin forests. But having large areas of forest has itself become destructive for it, for it attracts the people area involved in removal this precious ‘green gold’. In this way the natural thick forests of Lunglei district have also been degraded, where proximity to international border is an additional factor responsible for forests degradation. Hence, an attempt has been made here to study ‘Degradation of Forests in Lunglei District, Mizoram’.

1.1 LITERATURE SURVEY

It is a matter of serious concern that the present economic man forgotten the environmental and ecological significance of natural vegetations (mainly forests and grassland). The forests have destroyed so rapidly and alarmingly that the forest area at global, regional and local levels has markedly decreased. A lot of literature is available on it. Relevant literature had been reviewed here to understand the problem in proper perspective. Literature survey has been done according to important themes.

Forest

Before we talk about degradation of forests, we need to answer the question "What is a forest?" Most people think they know a forest when they see one. A forest is a lot of trees growing together. That may be true, but is a plantation, with lines and lines of trees growing like a giant wheat field, a forest? If a forest has been severely logged, leaving only a few trees here and there, is it still a forest? And if a forest contains many areas cleared for slash and burn agriculture, when does it stop being a forest and become farm land with groups of trees growing on it? These questions may seem academic, but arriving at clear answers is essential to understanding the condition of the world's forests.

Food and Agriculture Organisation (FAO) have been publishing assessments of the state
of the world’s forest for many years. These reports have become a world standard for forestry researchers. FAO defines forest as land of more than half a hectare with a tree-canopy cover of more than 10 percent that is not under mainly agriculture or urban use. These may seem clear, but they mean that areas used for agro-forestry with crops and trees growing together are not classified as forest because they are used mainly for agriculture, even though the canopy cover might be more than 10 per cent.

The TREES project (Tropical Ecosystem Environment Observations by Satellite) financed by the European Union, calls areas with more than 70 per cent canopy cover is 'Dense forests' and those with 40-70 per cent cover is 'Fragmented forests'. On the other hand, The United Nations Environment Programme (UNEP) uses more than 40 per cent cover for 'Closed forests' and 10-40 per cent covers for 'Open' or 'Fragmented forests'.

Several international organisations have adopted standards that are different to those used by FAO. The total forest cover area is grouped into three categories, namely, 'Dense forests' (crown density more than 40 per cent), 'Open forests' (crown density between 10 and 40 per cent). Forest canopy with less than 10 per cent is included in the 'Degraded forests'.

Which standard is used affects estimates of forest cover, and so the degree of degradation. For example, FAO’s 10 per cent coverage criterion gave forest cover in India as 19 per cent, but the 40 per cent figure reduced that to 11 per cent. Another factor complicating estimates of forest coverage is the way it is measured. Most estimates are made from satellite photographs. Recently, very high resolution photographs have become available from new satellites. These can distinguish more clearly between the tree crowns and the vegetation between them, both of which are usually green. Older satellite images are not as clear or precise as the latest ones are. Higher-resolution photographs usually give a lower estimate of forest cover than lower-resolution pictures.
Ecologically speaking, forest is a plant community, predominantly of trees and other woody vegetations with a closed canopy. In fact, the word forest is derived from the Latin word ‘Foris’ meaning outside, the reference being to a village boundary or fence, and it must have included all uncultivated and uninhabited land (Sagreiya 1997). Environmental Encyclopaedia (Eblen 2000) described forests are not only stands of trees, but also complex ecosystem of plants, animals and micro-organisms.

Several international organisations considers the FAO definition of forest, as the basic one but acknowledges that many other useful definitions of “forest” exist in published form. The fact that ‘forest’ has been defined in many ways in a reflection of the diversity of forests and forest ecosystems in the world and of the diversity of human approaches to forests. In this document, a forest is a land area of more than 0.5 hectares, with a tree canopy cover of more than 10 per cent, which is not primarily under agricultural or other specific non-forest land use. In the case of young forests or regions where tree growth was climatically suppressed, the trees should be capable of reaching a height of 5 metres in situ, and of meeting the canopy cover requirement (Repetto et al. 1988).

Forest includes natural forests and forest plantations. It is use to refer to land with a tree canopy cover of more than 10 per cent and area of more than 0.5 hectares. Forests are determined both by the presences of trees and the absence of other predominant land uses. The trees should be able to reach a minimum height of 5 metres. Young stands that have not yet but are expected to reach a crown density of 10 per cent and tree height of 5 metres are included under forest, as are temporarily unstocked areas. The term includes forest used for purposes of production, protection, multiple-use or conservation i.e. forest in national parks, nature reserves and other protected areas, as well as forest stands on agricultural lands e.g. windbreaks and shelterbelts of trees with a width of more than 20 metres, and rubber wood plantations and cork oak stands (Rudel, Bruce, Roper 1997).
Forest as an area (within the notified forest boundary) bearing an association predominantly of trees and other vegetation types capable of producing timber and other forests products. Evergreen forest is described, as a forests comprising thick and dense canopy of all trees, which predominantly remain green throughout the year. It includes both coniferous and tropical broad-leafed evergreen trees. Deciduous forest is described as a forest predominantly comprising deciduous species and where the trees shed their leaves once in a year. Degraded forest is described as a forest where the vegetation density is less than 10 per cent of the canopy cover. Forest blank is described as openings amidst forests without any tree cover. It includes openings of assorted size and shapes as seen on the imagery. Mangrove is described as a dense thicket or woody aquatic vegetation or forest cover occurring in tidal waters, near estuaries and along the confluence of delta in coastal areas. The word forest has many meanings but, nowadays it usually refers to an association of plants and animals in which trees are dominant (Hummel 1984). Forest is ‘closed’ if the trees cover most of the ground and ‘open’ if they trees are scattered. Small area of forest is commonly referred to as ‘woodlands’.

Degradation of Forests

Degradation of forests is a part of the broader environmental degradation, which means lowering in the environmental potential. Husain (1996) described environmental degradation as “qualitative and quantitative decline/impoverishment/decrease/devaluation in the ecosystem potentiality affecting habitat of man, plant and animal”. According to v'Singh (1997) environmental degradation is the deterioration in the physical components of environment brought in by the biological processes, particularly by human activities to such an extent that it cannot be set right by the self regulatory mechanism of the environment. Environmental degradation simply means overall lowering of environmental qualities because of adverse changes brought by human activities in the basic structure of the components of the environment to such an extent. These changes have adversely affected all biological communities and human society.
Although, the term degradation of forests is sometimes used in forestry, existing definitions are generally inadequate to capture actions that change carbon stocks because they lack specificity. Degradation of forests commonly refers to reductions in the productive capacity of the forests. As an example, the FAO definition states “changes within the forests class that negatively affect the stand or site and, in particular, lower the production capacity”. Notably, this includes selective logging, which reduces forest canopy cover, but normally not below the 10 per cent minimum threshold. Therefore, degradation of forests is the changes within the forests class, i.e. when a forest cover, and so production capacity, is reduced (FAO).

Like most terms, degradation is subject to misunderstanding. Often it is use in a pejorative sense to represent something that is undesirable. Indeed, desertification (another misunderstood term) refers to land degradation in dry areas. However, degradation is used here in a purely descriptive sense, following the path finding work by Food and Agriculture Organisation and United Nation Environment Programme refers to changes in the quality and quantity of forest which are an inevitable consequence of most forms of cultural forest modification. Degradation of forests involves the processes which result in the loss of forest cover, change in forest canopy density and loss of biodiversity.

Degradation of forests can be viewed from two angles, i.e., quantitative and qualitative. Hitherto, quantitative aspects in terms of forest cover, its distribution, demand and supply of forests products (Matthew 1983, Kalla 1988, Ramakrishna 1981) were given priority over qualitative aspects by researchers as well as policy makers. Little attention was paid to the qualitative side of the forest, which is mainly due to lack of data on degradation. It is necessary to understand various aspects of degradation of forests in order to formulate meaningful policies for checking degradation and improving the quality of forests. Further, while the area under forest is determined historically, quality of forests (degradation) depends on the day-to-day human use and misuse of forests.
Degradation means non-sustainable forests use, so future forests harvests are being affected. Historically, shifting agriculture did not have a major effect on forests quality but when it becomes more widespread or the recovery time under fallow is too short, then the area can begin to degrade. Forest fires, fuelled by dry debris from logging or slash-and-burn practices may also be damaging, as is extracting too many non-timber forests products and over-hunting. Taking too much firewood and seasonal livestock overgrazing can badly affect dry forests (Moran 1983).

World Resources Institute (1990) analysed forest loss from different literature sources. Witté (1992) point out that FAO and WRI estimates are similar (differing by only 10-15 per cent when the definitions are made compatible). Jepma (1995) describes the FAO and WRI data sets as the ‘forestry sector view’, with forest loss defined as the complete clearance of tree formations and their replacement by other land uses i.e. forest loss is land that is lost to forest sector's control.

A degraded forest is a secondary forest that has loss through human activities, the structure, function, species composition or productivity normally associated with a natural forest types expected on that site. Hence, a degraded forest delivers a reduced supply of goods and services from the given site and maintains only limited biological diversity. Biological diversity of degraded forests includes many non-tree components, which may dominate in the under canopy vegetation (FAO 2000). Moreover, degradation of forests is changes within the forests which negatively affect the structure or function of the stand or site, and thereby lower the capacity to supply products or services.

Degradation of forests continues rapidly in many parts of the world. The factors that affect forests conditions and changes in the livelihoods of forests-dependent people are the foundation for developing policies to minimise negative social and environmental impacts. The most basic problem in conserving forests is the complexity of the situation.
Causes of Degradation of Forests

Most world forestry organisations recognise the current loss of forests as a significant problem. This problem is expressed in terms of loss of resources, in loss of ecological function (e.g., carbon sequestration, hydrological function) and in terms of biodiversity. Worldwide recognition of degradation of forests as an environmental issue rose dramatically in the 1980 to 1985 period, when developing country governments and donor agencies came under pressure to exercise greater control. The total forest cover area of the world in 1900 was nearly 7,000 million hectares, but by 1975, it reduced to 2,890 million hectares, it means that within the periods of 70 years, the percentage of total loss of the forest cover area was 58.71 per cent (Brewbaker 1984 cf. Sharma 2000).

Based on the NRSA report, in 1972 the total forest cover area in India was 5,51,886 square kilometres which came down to 4,5,046 square kilometres in 1982. Consequently, during 1972 to 1982, the total depletion of forest cover area in Northeast India is 1,492.5 thousand hectares, in other words the Northeast India has lost 186.5 thousand hectares per year (NRSA 1982). According to the State Forest Report published by Forest Survey of India, in 1991 the total forest cover area in Mizoram was 1,885.3 thousand hectares. In the year 1997, the forest cover has come down to 1,877.5 thousand hectares, therefore, within 1991 to 1997 the total loss of forest cover area was 1.41 per cent to the total geographical area. In addition, in 1971, the total percentage of forest cover area in Lunglei district was 95.06 per cent, while in 2001 the percentage has come down to 87.21 per cent to the total geographical area.

Sharma (1992) summarises information on potential distribution of forest and woodland resources, suggesting that in the period 1850 to 1980, 15 per cent of the world's forests and woodlands were cleared, in Asia by 43 per cent. In 1980 to 1985 the forest was loss at an annual average rate of 11.4 million hectares or 0.6 per cent to the total geographical area in Asia. Now, it has almost doubled to 18.5 million hectares or 1 per cent per annum. It is the rate of acceleration of forest loss that is critical, are we still losing forests at an ever-increasing rate?
Degradation of forests, particularly in developing countries, are influenced by an array of structural problems related to the international economic regime (Tarasofsky 1995), as well as the underlying socio-economic features of the country itself. There are a number of clear causes of degradation of forests and countries differ greatly in the social factors affecting forests. Macro-economic policies, economic crises, infrastructure development and other factors can inadvertently but dramatically contribute to degradation of forests. In south-east Asia, the profit motive drives most deforestation through organised and illegal logging, both for lumber and wood pulp as well as land clearing for cash crops like coffee and oil palm by small holders, large private commercial estates and state-owned plantations. Other causes include ill-considered granting of concessions to log huge areas of forest. Widespread corruption in the government, police and military make it almost impossible to control logging in many countries (Gautam/Gupta 2001).

Conventional wisdom suggests that growing populations and consumerism lead to forest loss and degradation. Population growth compounded with other factors, such as landlessness, increasing poverty and government corruption, does add to the rates of deforestation. This is emotively expressed by Witte (1992) writing on Zaire. Deacon (1992) provides a detailed analysis of forest loss associated with both population growth and with a variety of political factors which affect resource tenure and access rights.

The forest ecosystems are drastically affected in areas where degradation has been carried out for want of wood and for raising of plantation crops. Rao (1990) wrote that the rapid growth of population, industrialisation and urbanisation are not only disturbing the natural ecosystem but brought forth changes that led to soil erosion, siltation and ecological imbalance. In pre-independence in India the basic philosophy of life was to live in harmony with nature but in post-independence in India it has changed to live in conflict with nature. India has marched on the road of industrialisation without affective
check on the population explosion and hence there has been environmental degradation. Sinha (1990) emphasised the quality of environment and the ecosystem in India is declining at an alarming rate as the country tries to bridge the gap between the statuses of developing and developed in the field of agriculture, industries and economy. Increasing population is one of the factors to degrade the forests. Due to high population pressure on land, more and more forestlands were brought under cultivation. Rai (1993) mentioned the principal factors of degradation of forests have been population explosion, both human and livestock. Leading to enhance the requirement of fodder, timber and fuel wood. The natural thick forests of Mizoram comprising of heterogeneous and valuable species have been degenerated and became an almost barren land. Traditional *jhun* system, lumbering and fuelling are the major factors that accelerate the degeneration and degradation of forests in Mizoram. Pachuau (1994) wrote that the forest of Mizoram has undergone a serious change due to continuous onslaughts by man on forest, clearance for *jhumming*, heavy exploitation and maltreatment by burning and over grazing at scattered places.

The first and most vital causes of forests depletion is human interference and natural disaster. Bhattacharya (1998) described with the onset of civilisation man has tried to satisfy the different objectives of livelihood at the cost of natural vegetal covers. The affect of human interference without having scientific knowledge has distorted the vegetal set up to a greatest extent. The next important causes of forests degradation is the natural and human induced calamities like cyclone storms, forest fires etc. Many trees are cut and the area are clear-cut, the forest is not capable of re-establish it. Moreover, even, if only a small proportion of the trees are selected for cutting, this may degrade the forests. Chauhan (1998) mentioned that thousand of years the action of man has been gradually diminishing the forests resources by burning, clearing and felling trees for fuel or to make way for agriculture, settlement or industry resulting to slow process of degradation.
Shifting cultivation has been degraded a large area of forest in every year. Even the forests are used for cooking purposes and also exploited for commercial purposes it led to the decrease of forest cover. According to Datta Ray and Alam (2000) the increase pressure on forests by wood based industries and unplanned and indiscriminate felling of trees for various purposes are primarily held responsible for the degradation of forests in Northeast India. Along with wood based industries, the shifting cultivation and denudation are responsible for the destruction of forest covers. Due to population pressure, more and more land brought under cultivation for increased food supply. The demand for fuel wood is increasingly steadily. Virgin forest is being exploited for commercial abuse.

Amita and Chakrabarti (2000) have also described the rich stock of natural forests in Northeast region traditionally contributed to the maintenance of atmospheric balance of the whole country and this was congenial to the livelihood of the native people. The unplanned and unrestricted flow of population from different states as well as from the neighbouring countries told upon the health of the region as such exodus involved destruction of the natural resources, especially forests. Forests are a major natural resource of India approximately one fifth of our landmass is under forest. Degradation stem from two main sources that are intertwined. First, the commercial demand for timber drives the felling of trees, either legally or illegally. Second the land under forest may be needed for alternative economics purpose (Gautam and Gupta 2001). Collection of fire-wood for cooking purposes, reduction of wetlands due to reclamation for agriculture, illegal tress cutting for timber trade are prevalent in Northeast India, it has led to the declined of forest cover. Kalita (2002) said that the factors responsible for the rapid reduction of forest cover in Northeast India are expansion of cultivation, encroachment of the forest land for agriculture land use and human habitat. Singh and Datta (2002) mentioned in their article the causes of degradation of forests in Northeastern hill region of India are expansion of agriculture land, demand for timber and fuel wood, animal grazing, forest fires and other minor factors.
1.2 STATEMENT OF THE PROBLEM

Age-old practice of *jhumming* (Shifting cultivation), has been widely practiced for long, leading to degradation of forests. In addition, majority of the people is dependent upon forests for fuel, fodder, lumbering, other forests products and excess exploitation of forests for these products also the causes of degradation of forests. Continuous onslaught by man on forests, heavy exploitation, and maltreatment by burning and over grazing have also affected the health of the forests. Moreover, the forests are under heavy pressure of increasing population to meet their requirements in various forms and that has also created degradation of forests. All these have led to not only change in forest cover but also change in forest canopy density and loss of biodiversity in the forests. Such problems and processes have also been occurring in the forests of the study area. Therefore, the researcher has studied the degradation of forests in Lunglei district, Mizoram.

To study the degradation of forests in Lunglei district, four main aspects have been taken into consideration. These are related with temporal variation of forest cover from 1970 to 2000, spatial variation in the loss of forests cover area on the basis of Block wise forest cover area, negative changes in the forest canopy density, loss of biodiversity and causes of forests degradation. The year 1970 has been taken as a cut off year, because detailed data are not available prior to that.

1.4 OBJECTIVES OF THE STUDY

The main objectives of the study are as follows:

(i) to find out the forest cover area of different time periods in Lunglei district from 1970 to 2000,

(ii) to investigate spatial variation in the degradation of forests, and

(iii) to find out the causes of degradation of forests in the study area.
1.5 RESEARCH QUESTIONS

To meet the requirement of the objectives and to derive some conclusions about the degradation of forests the research issues dealt with in the study include: (i) the rate and extent of change in forest cover area during 1970 to 2000, (ii) spatio-temporal variation of degradation of forests, and (iii) the causes responsible for the degradation of forests. The main issue is to find out temporal variation of forest cover from 1970 to 2000 and spatial variation in the degradation of forests during the study period. The factors responsible for degradation of forests in the study area are also investigated.

1.6 STUDY AREA

Lunglei district falls between 92°35'E to 93°55'E longitudes and 22°35'N to 23°35'N latitudes (Figure 1.1) the *tropic of cancer* just touching its northern end. It covers an area of 4,538 square kilometres. It is bounded by Myanmar in the east and Bangladesh in the west. It is also bounded by Serchhip, Aizawl and Mamit districts in the north and Lawngtlai and Saiha districts in the south. The area comprises predominantly of difficult hilly terrain with narrow valleys in between. In fact, it is part of the north-south running Indo-Myanmar or Arakan-Yoma Ranges. The hill ranges of the district are higher in the east than in the west. The average height is about 900 metres. The highest peak is *Purun* (1,749 metres), located in the northeastern corner of the district. Whereas the lowest peak *Rangte* (519 metres) is located in the west of Lunglei town. The difference of elevation from the valley floors to the hill tops varies from 232 metres in the western part of the area to 507 metres in the west central part and 720 metres in the central part, and 660 metres in the eastern part of the district. The drainage system comprises of the river Kolodyne (*Chhimtuipui*), river Dhaleshwari (*Tlawng*) and river Karnaphuli (*Khawthlangtuipui*). In the central part, the watershed of river *Chhimtuipui* and river *Tlawng* is clearly demarcated by Lunglei hills.
LOCATION MAP OF LUNGEI DISTRICT

Figure 1.1.
1.7 DATA BASE AND METHODOLOGY

The present study is mainly based on the secondary data collected from various sources/departments. The study heavily depends on the forest cover area generated by the Mizoram Remote Sensing Application Centre, Aizawl, on the basis of satellite imagery interpretation. Data has also been culled form the State Forest Report prepared by the Forest Survey of India for the study. Primary data has also been collected through field work mainly including on-the-spot assessment of the existing density of vegetation under different forest canopy categories. Personal interviews with the forest officials and some elderly people have also been of great help in collecting relevant information. Data have also been collected from the various published of books.

As it is a well-known fact that huge discrepancy is found in data on forest cover area provided by different departments working forest, agriculture and revenue. This is mainly due to adoption of different definitions of forest by these departments. Moreover, after setup of the Remote Sensing Application Centre in Aizawl, the demarcation of forest cover area has no doubt become easier and accurate, but in that case also, the skills of the interpreter can lead to two different sets of data from the same air photo or satellite imagery. For instance data provided by NRSA and Forest Survey of India, based on satellite imagery at a particular area, also do not match each other. Therefore, it becomes very difficult for the researcher to acquire the correct information about the forest cover area. The researcher has faced a lot of difficulty in collection of time sequence data (from 1970 onwards) about the forest cover area. There was no change shown in the forest cover area during 1970 to 2000 provided by the Department of Agriculture. But, the data provided by the Forest Department did show some changes in the forest cover area. However, the researcher relied on the data given by the Remote Sensing Application Centre, Aizawl as more accurate is possible to come from the latest tools of data acquiring, i.e., with the help of remote sensing. From this data on forest cover area of the given period some change could be found and decline in forest cover area is clearly
visible from it. But in this case also, another problem has aroused because the remote
data is available only for 1990 and 2000 and the data given for 1970 and 1980 is
based on the reports of the Forest Department, Aizawl. Technically, both the sources of
data can not be compared but in absence of authentic data the researchers has to rely on
forest cover area provided by Remote Sensing Application Centre, Aizawl, which also
include data from the Forest Department, Aizawl for the previous decades. High
resolution satellite imagery are available now on which we can distinguish more clearly
between the tree crowns and the vegetation between them, both of which are usually
green. Regarding the definition of forest adopted by different departments some clarity is
required. The Forest Department, Aizawl has adopted the Dictionary meaning of forest to
avoid any confusion, and according to it “forest is a large area of land covered with trees
and undergrowth”. It is generally more extensive than woodland, consists of either
natural or planted vegetation with tall matured trees, which are often of commercial value
and is dense growing forming a continuous canopy. Whereas, the Remote Sensing
Application Centre, Aizawl has followed the remote sensing keys to identify types and
area of forest in Lunglei district.

Data on forest canopy density has been collected form the Forest Department,
Aizawl, for 1970 and 1980. After the statehood in 1987 the Forest Department was
renamed as Environment and Forests Department by the Mizoram state government.
Therefore, for 1990 and 2000 data on forest canopy density has been taken from the State
Forest Report prepared by the Forest Survey of India.

Block wise data on forest cover area has been collected to see spatial variation of
degradation of forests in the study area and for the studied period. To understand causes
of degradation of forests some forest personnel, elder forests dwellers, and officers of
different departments were interviewed personally. Photographic coverage of the
problematic areas has been done to depict degradation of forests. Various data have also
been used to prepare tables, maps and charts for better understanding and showing a clear
picture of degradation of forests in the study area.
1.8 CHAPTER SCHEME

The whole study has been divided into five chapters. The first chapter is the introduction of the study and it includes review of relevant literature, statement of the problem, objectives of the study, research questions, study area and data base and methodology. In a sense, this chapter is important as it highlights the purpose of the study and act as an introductory part for a proper understanding of the whole problem. The second chapter deals with the environmental setting of Lunglei district. The third chapter is the crux of the dissertation as it deals with different aspects of degradation of forests in study area. While the fourth chapter focuses on the main causes responsible for the degradation of forests in the study area. The fifth and final chapter contains summary and conclusion along with some suggestions to conserve the valuable forest of the area.