

**COLONIAL FORESTRY IN ASSAM IN THE FIRST
HALF OF THE TWENTIETH CENTURY: FOREST
POLICIES, COMMERCIALIZATION AND
INDIGENOUS IMPACT**

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CERTIFICATE

Certified that the dissertation entitled "*COLONIAL FORESTRY IN ASSAM IN THE FIRST HALF OF THE TWENTIETH CENTURY: FOREST POLICIES, COMMERCIALIZATION AND INDIGENOUS IMPACT*" submitted by **SRIJANI BHATTACHARJEE** is in partial fulfillment of the requirements for the degree of **MASTER OF PHILOSOPHY** of this University. This dissertation has not been submitted for any other degree of this University, or any other University, and is her own work.

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The responsibility for all errors in the dissertation lies solely on me.

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CONTENTS

	PAGE NO
ABBREVIATION	1
INTRODUCTION	2-10
CHAPTER ONE	
EARLY HISTORY OF COLONIAL FORESTRY IN ASSAM	11-34
CHAPTER TWO	
COMMERCIALISATION OF ASSAM FORESTS: 1912-1945	35-77
CHAPTER THREE	
COLONIAL STATE AND THE NATIVES	78-105
CONCLUSION	106-111
BIBLIOGRAPHY	112-118

ABBREVIATIONS

P.R.F.A.A.	Progress Report on the Forest Administration of Assam.
Q.R.F.A.B.I.	Quinquennial Review on the Forest Administration of British India.
Q.R.F.A.A.	Quinquennial Review on the Forest Administration of Assam.
N.L.	National Library, Kolkata.
A.S.A.	Assam State Archives, Guwahati.
N.A.I.	National Archives of India, New Delhi.
N.E.F.A.	North East Frontier Agency.
N.E.I.S.S.R	North East Indian Council of Social Science Research.
N.E.I.H.A	North East India History Association.
T.E.R.I	Tata Energy Research Institute.

INTRODUCTION

This study aims to serve as an outline to the evolution and impact generated by British forest policies in the province of Assam in the twentieth century. From the historical perspective, it intends to examine how British colonialism had gradually crept over the forests of Assam thereby commercializing the forests of the region and systematically eroding the rights of the forest dwellers over their resources. For the tribes of Assam, forests not only acted as a source of food, shelter and timber but also as the abode of tutelary deities and spirits. Therefore, forests possessed an important place in the worldview of the forest dwellers. Thus the state's appropriation of their rights over the forests did not simply mean the erosion of their economic base but also an onslaught on their culture and tradition.

As a theme of study, 'Environmental History' has come up only recently. According to David Arnold and Ramachandra Guha, the terms 'ecological history' and 'environmental history' should not be used synonymously as there exists a sharp distinction between the two. The term 'ecology' focuses narrowly on the study of nature and excludes man as an irrelevant factor in the shaping of the natural environment. While the term 'environment' includes within its fold the study of ecology, the relation between man and nature, the contribution of man in shaping the natural environment, issues of deforestation, exploitation of forest resources etc and the role of environment as an agent of influence in human history¹. Thus the latter has a much broader scope. In India, environmental history as a part of historical studies had emerged only in the recent past.

With the emergence of this new field of enquiry in our country, a number of researches have been dedicated to the environmental history of the subcontinent. Although studies on environmental history is a subject of recent origin, the study of forests in India as a theme of research was engaged by even the forest conservators of the colonial era. The imperial forester historians like Berthold Ribbentrop and

¹ David Arnold and Ramachandra Guha, *Nature, Culture, Imperialism: Essays on the environmental History of South Asia*, 1995, p.2.

E.P. Stebbing while narrating the evolution of British forestry in India had the broad aim of glorifying the colonial attempts at forest conservation. These scholars were of the opinion that the establishment of Scientific Forestry in India was an urgent necessity to save the destruction of forests by the pre-British rulers and the natives. Both Ribbentrop and Stebbing were oblivious of the exploitative dimension of Colonial Forestry in India and emphasized on its policies of forest conservation. To quote E.P. Stebbing, "...destruction of forests in India was carried on wantonly by the natives. The forests were a communal property and consequently the natives used to cut them under no restrictions and bars. The rapacious destruction of forests was brought under scientific management for the first time by the British."² Similarly, Ribbentrop held the view that the pre-British rulers of India starting from the Aryan invaders who were believed to have entered India about 2000 years B.C were probably both a pastoral and agrarian people and to a certain extent denuded the country of its pristine forests³. In the context of Assam, he had mentioned that the discovery of the remains of buildings, temples, and palaces buried in dense jungles are witnesses of the forest depletion caused by pre-British rulers⁴. Ribbentrop, however, did not consider the pre-British natives as the sole destroyer of forests but also assigned a significant role to the early British commercial enterprises in India. To quote him, "Our Indian forests were exposed to the legitimate demands of a rapidly spreading modern civilization"⁵. Although Ribbentrop had held the view that along with the pre-British natives the early British commercial enterprises in India had played an important role in the depletion of Indian forests, he was also of the opinion that the pre-British rulers of India were actually the pioneers in this regard⁶.

The views of the imperial forester historians were challenged by the Indian scholars on several grounds. According to Ramachandra Guha and Madhav Gadgil, the main ambition of the Colonial Forest Department in India was the production of large commercial timber and generation of revenue. They were of the opinion that

² E.P. Stebbing, *The Forests of India*, vol 2, 1923, p. 415.

³ Berthold Ribbentrop, *Forestry in British India*, 1900, reprint 1989, p. 49.

⁴ *Ibid*, pp. 52-53.

⁵ *Ibid*, pp. 65-67.

⁶ *Ibid*.

the rate of forest destruction in India had increased considerably after the advent of the Colonial Forest Department in our country. Guha, while dealing with the forests and people of Tehri Garhwal and Kumaon divisions had held the view that the indigenous restraints based on religion, folklore and traditions on the use of forests acted as a protective ring around them which was badly hampered with the coming of the Commercial Forestry in the divisions resulting in large scale forest diminution⁷. In order to explain the commercial attitude of the colonial foresters, Guha and Gadgil had traced the origin from the Industrial revolution in England. To them, along with the economic, political and social changes brought about by the revolution, significant changes also appeared in resource use. Wood for instance that was consumed on a limited scale for domestic fuel, making of tools and furniture and construction of houses etc in subsistence economy began to be converted into papers or burnt as fuels for steam engines and ships. Thus with the rapid growth of industrialization, trees became a commodity for commercial profit⁸. The process of commercialization of forests leading to its depletion was accelerated with the beginning of railways in India.

For Ajay Skaria, who had written on the Dangs of South Gujarat, desiccationism did play a major role in the setting up of Forest Department in India, but in course of time it merged with the imperial forces of production, exploitation and revenue⁹. It was the resultant blend of desiccationism and commercial considerations and the notion of the rational use of forests, which formed the basis of forest departmental practices. By the turn of the twentieth century, the commercial aspect became the prime consideration of the colonial foresters¹⁰. Mahesh Rangarajan while tracing the environmental history of the Central provinces from 1860-1914 also holds a similar view. He is of the opinion that though the Colonial Forest Department had been established in India as the saviour of forests from the destruction caused by the natives, the rate of deforestation had increased to

⁷ Ramachandra Guha, *The Unquiet woods*, 1989, pp. 29-32.

⁸ Madhav Gadgil and Ramachandra Guha, *This Fissured Land*, 1993, p.114.

⁹ Ajay Skaria, *Timber Conservancy, Desiccationism and Scientific Forestry: The Dangs 1840's-1920's in Nature and the Orient*, 1998, pp. 597-598.

¹⁰ *Ibid*

a much a higher degree after the advent of the department. In the words of Rangarajan, "It is striking that conservation as well as rapacious use of natural resources are both seen to be more pronounced in the colonial context."¹¹ The scholar, however, did not assume that a great ecological equilibrium prevailed during the pre-British period and there were no fights over forests. According to him, depletion of forests and fights over natural resources did exist in pre-British era but in a limited degree and never approached the scale they did under the colonial administration. Depletion of forests was not a matter of concern and there are no instances of ecological collapse with adverse consequences on the village communities. The pace of forest destruction in India had much accelerated after the advent of the Colonial Forestry in the country¹².

Marlene Buchy, who has discussed the British colonial forests policies in South India is of the view that though the colonial forest measures had proved detrimental to the interests of the local communities, they were not unscientific in nature. The scholar claimed that, "As far as forest exploitation itself goes, little is ultimately known about what really took place. Though the policies were inadaptable to the local circumstances, but foresters were not adventurers motivated by profit, but were properly trained and qualified professionals."¹³ David Hardiman in his article on the Dangs of South Gujarat, however, presented a different estimation on the colonial forest policies in the region. Here the scholar is not oblivious of the exploitative and imperialistic nature of the British foresters. In the course of his study he has discussed the measures adopted by the British to bring the forests of the Dangs under effective British control which often led to popular unrests. But he has challenged those views according to which there existed a symbiotic relationship between the nature and the natives prior to the advent of the British¹⁴.

¹¹ Mahesh Rangarajan, *Fencing the Forests*, 1996, p.3.

¹² *Ibid*, p. 10.

¹³ Marlene Buchy, *British Colonial Forest Policy in South India : An Unscientific or Unadapted policy? Nature and the Orient*, 1998, p. 669.

¹⁴ David Hardiman, *Power in the Dangs: The Dangs 1820-1940*, *Subaltern Studies*, Volume 8. 1994.

As regards Assam, secondary literature devoted to the environmental history of the region is still in its infancy. Even the environmental histories dealing with colonial forest policies at the macro level scantily mentions about the situation that had prevailed in Assam in the colonial period. Till date very few works have been dedicated to this field of study and the most prominent among them is A.C.Sinha's *Beyond the Trees, Tigers and Tribes*. In this book the author expressed his eager concern on the detrimental consequences produced by the exploitative and imperialistic forest policies of the British government on the forest dwelling tribes of Assam. According to him, such policies had led to some far reaching impact which appeared to be more pronounced in the post colonial period. While historically tracing the various administrative as well as exploitative measures of the Colonial Forest Department in Assam in the 19th and 20th century which were more directed towards accruing of revenue, Sinha has held the opinion that the colonial and post colonial capitalism had disrupted the symbiotic relationship between the tribes and the forests in many ways. According to him, the natives in the pre- colonial regime lived in perfect harmony with the environment. There was no excess use of resources and an ecological balance prevailed within and with the adjoining regions. The imposition of British administrative machinery with the aid of German foresters over the forests of Assam in the second half of the 19th century played a significant role in exploiting the resources of the region and curtailing the traditional rights of the village communities over land, forests and wild life. The imposition of an alien market economy created a feeling of deprivation among the forest tribes of Assam leading to an unequal struggle between the alien imposition and indigenous survival resulting in the suppression of the latter. He has suggested a connecting link between present day regional insurgency, autonomy demands and regional party movements in North-east India and the incursions of market economy on the survival resources of the indigenous people.¹⁵

Richard P Tucker has also dealt with the forests of Assam in his article titled 'The Depletion of India's forests under British imperialism: Planters, Foresters and Peasants in Assam and Kerala.' Here the author expressed deep concern over the

¹⁵ A.C.Sinha, *Beyond the Trees, Tigers and Tribes*, 1989, pp. 164-167.

increasing rate of deforestation in Assam in the 20th century due to the combined interests of tea planters, imported labourers and immigrant peasants in the region. According to him, the greatest danger that had emerged as a result of various commercial interests in Assam was the depletion of her natural resources. Tucker's assumptions in this essay can be challenged on the following grounds. He did not assign any role to the Colonial Forest Department in the deforestation of Assam and portrayed it as an organization whose primary aim was in halting the process of forest destruction and introducing a rational system of forest administration. He has totally ignored the commercial aspect of the Colonial Forest Department in the region. Another aspect was Tucker's assumption regarding the mutual conflict of interests between the Revenue Department and the Colonial Forest Department. He has projected the Revenue Department as an organization whose motive was in opening up more forest lands for cultivation thus resulting into a conflict with the Forest Department whose ambition was to protect the forests. It is true that that a silent clash was growing between the two departments on the issue of land but the commercial interests of the Forest Department in those lands cannot be overlooked. It was in favour of protecting those lands, which contained rich Sal trees, the timber having the most commercial significance.¹⁶

The present study explores the evolution of colonial forest policies in Assam from 1912 to 1945. During the period under review, Assam was a vast province comprising of all the states of North East India except the princely kingdoms of Manipur and Tripura. This study intends to focus on the system of colonial forest management in Assam in the period mentioned above dealing with the aspects of conservation, exploitation and forest revenue which had led to the commercialization of the virgin forests inhabiting the region. The provincial level study on the forests of Assam enables us to understand the various problems and changes, which the tribes had undergone due the imposition of an alien economy in the region. This study includes a chapter dealing with the impact created by the imperial forest policies on the natives of Assam. It also includes within its fold the

¹⁶ Richard P Tucker, *The Depletion of India's Forests under British imperialism : Planters, Foresters and Peasants in Assam and Kerala in The Ends of Earth- Perspectives on modern environmental history*, edited by Donald Worster, 1988, pp. 121-127.

various developments in terms of trade in forest products during the World Wars and the Great Depression of 1930's. The study on the environmental history of Assam greatly helped us in tracing the processes of colonial intervention in the region leading to ecological changes. The distribution of chapters dealing with the above are as follows:

Chapter one stands as a background to this study and deals with the colonial period subsequent to the annexation of Assam after the treaty of Yandaboo in 1826. This chapter is divided into three sections. The first section draws an account of the various measures adopted in terms of forestry in Assam prior to the advent of the Colonial Forest Department in the region. It includes within its fold the circumstances that had led to its establishment and the attitude that existed among the British authorities regarding the indigenous methods of forest use. Firstly, the section focuses on the pioneering efforts made by the Deputy Commissioners in the forest management of Assam and the role played by the Revenue Department and the Public Works Department towards that end. I focus mainly on the accounts of the forest officials and their efforts to legitimize the establishment of the Forest Department as a consequence of the mismanagement of these departments and the damages caused to forests by the natives. The second section deals with the beginning of the Colonial Forest Department in Assam. It takes into account the efforts adopted by the colonial foresters regarding the acquisition of knowledge on the forest resources existing in the province with emphasis on identification of commercial species and mapping of areas to be demarcated as reserves. It focuses on the district wise study made by Mr. Gustav Mann, the Assistant Conservator of Assam forests in 1868-70 and Dr. T. Anderson, the Superintendent of Royal Botanical Gardens, Calcutta. In this section, I center on the initial nature of the systematic forest management in Assam leading to the division of the province according to forest types with their internal classification, the system of supervision employed over them and emphasis on the preservation of commercial species with stress on the growth of plantations. The third section focuses on the commercial aspect of the Forest Department in Assam in the later half of the 19th century. Firstly, it studies the gradual change in attitude of the colonial foresters towards the

indigenous forest users and the relationship of the Forest Department with the departments previously in control of forests in the region. This section includes within its fold, the initial phase of forest trade in Assam and the trading connections betweenth department and other trading concerns such as railway companies and tea box industries working in the province. It also deals with the various developments that had taken place till the year 1912 when Assam attained the status of a separate province.

In chapter two, I discuss the process of commercialization of Assam forests in the first half of the 20th century (1912-1945). This chapter includes within its fold the aspects of conservation and exploitation of Assam forests with emphasis on forest revenue. It is divided into four sections. The first section focuses on the measures of forest conservation in Assam in the first half of the 20th century with subheadings on the growth of reserved and unclassed state forests, establishment of forest villages, protection of forests from cattle and fire, and introduction of silvicultural measures in the province. The second section studies the course of resource extraction in Assam from the second decades of the 20th century especially with the beginning of the First World War when timber trade in Assam achieved momentum which was further accelerated with the outbreak of the Second World War. This section is subdivided in four parts dealing with the development of transport and communication in the province, minor forest produce such as Bamboo, Rubber and Faunal resources, major forest produce with details on forest types existing in Assam and their commercial uses and the contribution of the Forest Utilization Officer in the exploitation of Assam forests. The third section deals with the aspect of forest revenue. In this section, the issue of forest revenue has been discussed by dividing it into four parts. They were (a) Boom period beginning from the First World War till the outbreak of the Great Depression of 1930's when the revenue from Assam forests greatly increased (b) Slump period when income from forests was lowest in the province due to world wide trade Depression (c) the period of recovery when there was gradual revival in the market and consequently forest revenue also exhibited an increasing trend (d) the Second World War period when forest revenue accrued from Assam was at its peak. The last section discusses the

personnel policies of the Forest Department in Assam in the first half of the 20th century.

Chapter three focuses on the impact created by the colonial forest policies on the various section of the native population of Assam in the period under review. For the convenience of study, I have divided the native population according to their occupation into five parts namely jhum cultivators, pastoralists, hunter gatherers, forest villagers and settled agriculturalists and divided the chapter into five divisions dealing with the impact of colonial forest policies on these sections of population. Here, I try to look into the local responses and changes brought about by the colonial forest administration on the socio-economic life of the indigenous forest users.

The thrust of this work is to understand the course of colonial intervention into the forests of Assam and study their policies and changes produced as a result of colonial forest administration on the ecological sphere as well as on the socio-economic life of the natives inhabiting the region. The study concentrates on the first half of the 20th century (1912-1945), as it was the most important period when significant changes appeared in the definition of natural resources in Assam as well as on the methods of indigenous forest use in the province. The study comes to a close by the end of the Second World War (1945) when the phase of imperial control over the forests of Assam was on the verge of its conclusion.

CHAPTER ONE

EARLY HISTORY OF COLONIAL FORESTRY IN ASSAM

Assam forms a typical example of those provinces of India where no attempts at forest conservation were made by the British during the period when colonial forest conservation had gained momentum in all other parts of India. After the annexation of Assam to the British empire of India in 1826 as a consequence of the Burmese wars, the region was placed under a Commissioner who governed it according to the orders of the government of Bengal. Till 1864, Colonial Forest Department was not established in Bengal and consequently was non-existent in Assam. It came to Assam much later than Bengal. The former situated on the northeastern edge of India was a landlocked country due to a number of factors, which impeded the growth of the British into the region till the much later years. The factors responsible were-

- Difficult topography of the region.
- Poor means of transport and communication, which basically consisted of waterways.
- Presence of diseases like malaria and black fever with very poor medical facilities.
- Acute scarcity of labour.

Though the above acted as stumbling blocks in the way of colonial penetration in Assam, they could not mar the British interests totally. The British authorities had strong ambition of establishing a complete hold over the land and people of Assam. Here too, some important factors played a major role-

- The British urge to exploit the resources of the region for commercial purposes.
- The fear of Burmese invasion at the frontier.

Assam was one of the frontier provinces of India due to which a stronghold over the region was necessary to ensure peace and security at the frontier. The British policies in the border province of Assam were guided by the phobia of

Burmese invasion at the frontier and consequently their policies were safeguards to protect British political and commercial interests in the province. In this context, B.C.Chakrabarty writes, "As the government's north western frontier policy was very much influenced by the fear of Russian advance in Afghanistan, in the north eastern frontier of India too, the fear of Burmese aggression persisted in the minds of government for many years after the conquest of Assam."¹

The Colonial Forest Department like other departments under British aegis was a branch of British imperialism whose ambition lied in exploitation of the native resources in order to meet the revenue needs of the empire. The early history of Colonial Forestry in Assam can be traced under the following sections:

Section One: Forests management in Assam prior to the advent of Colonial Forest Department in the region.

Assam occupied a distinguished position in regard to her forests in all parts of India. The various British officials who had visited the province had made enchanting remarks about her natural beauty. According to Arnold Wright, "the high hills and undulating plains covered with densest jungles and fire timber trees meet the eye in every direction, while the rivers which are fairly numerous, provide beautifully pure water for household and other purposes."² Most of the British officials made remarkable comments about the forests existing in the region. According to Richard Nolan, a British officer stationed in the North Cachar hills division of Assam, "the country through out is covered with thick jungles, mostly bamboos in the valleys and heavy tree forests, with thick undergrowth of evergreen shrubs and cane break on the higher slopes of the hills.... During the dry seasons little water is to be seen in the river beds but during monsoons they become roaring torrents"³

Prior to the establishment of Colonial Forest Department in Bengal in 1864, some efforts were made to investigate the natural resources available in Assam.

¹ B.C.Chakrabarty, *British relations with the hill tribes of Assam since 1858*, 1981, p.22.

² Somerset Playne, *Bengal and Assam, Bihar and Orissa*, 1921, London, p. 424.

³ *Hundred years of Haflong, centenary commemorative souvenir, 1885-1995*, Delhi, 1995. p. 22.

Examinations were made into the natural wealth of Cachar, Sylhet and Goalpara divisions. During this period, the Deputy Commissioners stationed in various parts of Assam played a significant role in accumulating knowledge about the resources of the areas under their control. Captain R. Stewart, the Deputy Commissioner of Cachar, in his report on the forests of his district remarked: "The district contains magnificent forests of an almost tropical character, similar in many essentials to the great forest belt stretching south from Cachar through the Lushais, the Chittagong Hill tracts and Chittagong. The entire north portion of the district being the southern slopes of the Burraill range of mountains is forest clad and contains both valuable and valueless timber in great abundance."⁴ The Deputy Commissioners at that period greatly emphasized on the local use of resources for acquiring information about their respective areas. The same officer as mentioned above wrote an interesting note in 1832 on the timber trade in Cachar and the revenue system in the district where the revenue was derived by establishing custom 'ghats' on the bank of the river Barak on which all rafts being floated down had to pay duty for each timber.⁵ In this context, the views of the Deputy Commissioner of Garo hills can also be cited. He had laid great importance on the cotton trade in the district and encouraged its cultivation by the introduction of improved seeds, which if properly done could be a source of supply to Manchester. While dealing with the cotton trade, he had also accumulated knowledge about the timber species existing in Garo hills, which were expected to be valuable, and if well preserved with all reasonable rights of the Garos could prove to be a lucrative source of revenue to the government.⁶

In spite of such pioneering efforts made by the Deputy Commissioners, thorough information regarding the natural resources of Assam remained quite obscure till the advent of Colonial Forestry in the region. To quote E.P Stebbing, "There is a curious lack of any mention of the forests of Chittagong hill tracts and Lushai hills. This is probably attributable to the same cause which confines the description of the Assam forests to Sylhet and Cachar. The great mass of forests of the extensive tracts of country comprising the Naga hills and Manipur jungles which

⁴ E.P. Stebbing, *The Forests of India*, Vol.2, 1923, p.400.

⁵ *Ibid*, pp. 398-401.

⁶ *Bengal Papers*, 1870-71. (ASA)

stretch southwards through the rough forest covered tableland of the Khasia and Garo hills and still further south into the Lushai hills tracts and Chittagong district to the sea board was at the time an unknown country peopled, with the exception of the Chittagong district by wild aboriginal tribes.”⁷ In September 1864, Dr T. Anderson, the Superintendent of Royal Botanical gardens Calcutta, was appointed as the Conservator of forests of Bengal and Assam to investigate into the natural resources of the region which was also known as ‘lower provinces ‘ at that time.

The colonial investigation into the natural resources of Assam held the natives primarily responsible for the destruction of its forest cover. Sal (*shorea robusta*) was considered to be the most important from the commercial point of view which grew in great abundance in the divisions of Goalpara, Darrang, Khasi and Jaintia hills, Kamrup, Nowgong and Garo hills. Shifting cultivation, known as ‘Jhum’, was the principle means of livelihood for the indigenous natives of Assam. However, the colonial officials regarded it as the greatest danger to forest resources. As early as 1832, Captain .R. Stewart, the Deputy Commissioner of Cachar, rendered the following opinion: “Jhum cultivation is in full sway, and is the greatest enemy to the timber.”⁸

E.P. Stebbing too, had vehemently condemned shifting cultivation in Assam. According to him, “The forests of this region had for centuries been devastated by cutting and burning of the best timber to form ashes to fertilize their wretched fields of half wild grains.”⁹ Such an attitude was expressive of the low impression that the colonial authorities held regarding the native methods of cultivation. Sanderson, the officer in charge of the Kheddah establishment in Dacca and also the author of the book entitled “Thirteen years amongst the wild beasts of India”, had remarked, “Jhuming was the method of livelihood of the hill tribes and areas of fine forests were destroyed by this method of cultivation, the areas so treated becoming covered

⁷ E.P.Stebbing, *The Forests of India*, Vol 2 ,1923, p.403.

⁸ *Ibid*, p.403.

⁹ E.P.Stebbing, *5th five year plan Assam Hill areas*, Volume one, p. 3.

with dense masses of small muli bamboo (*melocanna bambusoides*), or with coarse grass, plantains and inferior species of trees".¹⁰

Apart from shifting cultivation, the native timber trade was also considered responsible for the destruction of trees. The same officer further stated, "Enormous amounts of valuable timber must have been cut out and it is probable even at this time that all fine timber on the banks of the rivers in the lower parts of their courses had been cleared."¹¹ Sal was considered as the most important specie of commercial significance found in Assam and therefore great premium was laid on its preservation. In 1850, first mention was made for the preservation of the forests of Assam when the Collector of Kamrup division reported to the Commissioner of the Province that woodcutters from Bengal had made their appearance in Kamrup and also in the districts lower down the Brahmaputra in the quest of Sal and exhausted the forests there by indiscriminate felling. He suggested that a tax of Rs. 15 per 100 logs should be levied instead of letting the timber trade remain uncontrolled.¹²

During this period, a number of authorities exercised governance over the forests of Assam. The Deputy Commissioners were in charge of the forests lying within their respective jurisdictions. The Public Works Department (henceforth P.W.D) also had some authority over the same as it was the principal customer of forest products at that time. Some parts of the forests were also under the control of the Revenue Department which in 1852 abolished the system of levying taxes on logs and introduced the policy of farming out certain tracts of forests to the highest bidder for five years. For it was contended by them that the farmers should be left at liberty to work in the forests. "These conservancy measures", they held, "could be considered after the forests had been cleared".¹³ In 1868, a new revenue system was introduced under which small tahsildars, also known as mouzadars, were appointed

¹⁰ E.P.Stebbing, *The Forests of India*, Vol.2, 1923, p. 434.

¹¹ *Ibid*, p.434.

¹² Progress Report on the Forest Administration of Assam, 1874-75 by Gustav Mann, Assistant Conservator of Forests Assam, Shillong, 1875, p.1.(NL)

¹³ E.P.Stebbing, *The Forests of India*, Vol.3, 1926, p.214.

and the protection of forests was made over to their charge with the rest of the land.¹⁴

The Revenue Department soon proved itself inadequate in protecting the forests as well as realizing revenue from them. It was found that the Bengal woodcutters were felling the Sal forests of the Eastern Duars in the Goalpara district under the encouragement of the mouzaders. During that period, in the Goalpara division the woodcutters paid a nominal amount of Rs 4.4 per axe a year to the Deputy Commissioner, being calculated at the rate of two and half annas per tree. There were always miscalculations in regard to the trees being cut as the correct information about the latter would minimise the share of profit of both the timber cutters as well as the mouzaders. The Deputy Commissioner after being aware of the corrupt practices taking place in Goalpara forests decided to increase the taxes. At this, the mouzaders who was making lucrative business out of it, made representations to the Deputy Commissioner about the hardships that would be faced by the woodcutters if the taxes levied was raised. In the Kamrup district, matters were worse as the greater parts of the most valuable Sal forests had been made over the Lower Assam Tea Company as wasteland. Such a policy was being followed by the colonial state right from the fourth decade of the 19th century onwards when tea cultivation made its inception in Assam. In Darrang district, rubber trees were destroyed by over tapping and felling. Not much information is available about the role played by the Public Works Department regarding the management of forests, but it is evident that the activities of the Revenue Department had a detrimental impact on its working. In Nowgong district, the small Sal forest was worked so heavily that the P.W.D. had no timber to construct bridges on the Assam trunk road.¹⁵ The Sibsagar district had very little forest left anywhere as most of them were granted as wastelands.

The above state of affairs created an atmosphere when the colonial authorities considered the implementation of forest conservancy in Assam as an

¹⁴ Progress Report on the Forest Administration of Assam 1874-75, Shillong, 1875, p.2.(NL)

¹⁵ These roads were under the superintendance of the P.W.D. and maintained out of imperial funds. E.P.Stebbing, The Forests of India, Vol.3, 1926, p.215.

urgent necessity. Preservation of forests was given the prime importance which if properly preserved could serve as a lucrative source of revenue in future. E. P. Stebbing was of the opinion, " Those who sit at home at ease and do not penetrate and search the forests are apt to look upon them as inexhaustible, a common term applied to forests, though none can be more inappropriate, but the areas covered with forests are yearly being encroached and the contents fast cleared."¹⁶

The above statement, however, does not imply that the British foresters at this period were greatly concerned about the evil impact of forests depletion on the state of environment, amount of rainfall and on the condition of soil. The preservation of trees of commercial significance was emphasised so that they could serve as a storehouse for future exploitation. In this context, Sir Dietrich Brandis, the Inspector General of Forests stated the following in regard to the Assam valley districts, "It cannot be said that the maintenance of a certain forest area in the Assam valley is likely to have any appreciable effect upon the climate. The climate of the valley is influenced by the position, elevation and configuration of mountain ranges which enclose it, and is not likely to be affected by changes in the area in the valley under grass, rice, tea or forests. Nor can it be said that the retention of soil will be prompted by forest conservancy in the village or the formation of ravines and landslips will be prevented thereby."¹⁷

As the colonial authorities considered 'jhum' cultivation as a grave danger to the forests of Assam, they often held it responsible for the changes in the amount of rainfall in the province. At this point, the view of Sir Berthold Ribbentrop, an efficient forester and the Inspector General of forests deserves importance. He was of the opinion: "The monsoons of India, it is argued, must be quite independent of forest growth. Quite so! Forests can have no influence what so ever on the amount of moisture drawn from the ocean, and the general direction of the winds is unquestionably governed by greater causes....."¹⁸ By the second decades of the 20th century, a similar view was held by Sir William Schlich, the Inspector General of

¹⁶ E.P.Stebbing, *The forests of India*, vol 2, 1923, p. 415

¹⁷ Dietrich Brandis, *Suggestions regarding Forest Administration in Assam*, 1879, p. 9. (NL)

¹⁸ Berthold Ribbentrop, *Forestry in British India*, first edition 1900, reprint 1989, p. 56.

forests after Sir Dietrich Brandis and the former Conservator of Bengal forests. He was of the opinion, "The Indian influence of forests on rainfall was very small. The results of the enquiries made into the matter showed that the increase or decrease of forests did not lead to any permanent changes in the amount of rainfall over large tracts of India. Forests may increase the rainfall but not in any marked degree since the main bulk of rainfall in India depends on the monsoon currents mostly affected by the conditions outside India"¹⁹

In the year 1868-70, Mr. Gustav Mann was appointed as the Assistant Conservator of Assam forest and was entrusted with the task of acquiring thorough information about the forests of the region. The task consisted of the determination of areas and conditions under which the species of commercial significance grew their local uses and market value etc. Dr. T. Anderson, the Superintendent of Royal Botanical gardens, Calcutta and the Conservator of the forests of Bengal and Assam, was assigned the similar task of collecting information about the Bengal forests. The reports submitted by Mr. Gustav Mann and Dr. T. Anderson on the forests of Assam and Bengal culminated in the publication of a complete note on the forests of Assam in December 1870 in the resolution to the government of Bengal.

Section two: The initiation of colonial forestry in Assam.

The reports submitted by Mr. Gustav Mann and Dr. T. Anderson on the forests of Assam were the first of its kind in regard to the province. The complete note on the forests of the region based on the reports made a district wise study on the natural resources of Assam. According to it, the conditions prevailing in Assam during that period were as the following:

Sylhet- About half the area of Sylhet proper and all the Jaintia forests belonged to the government. The valuable species consisted of jarul (*lagerstroemia flos-reginoe* Retz) and nageshwar (*Mesua ferra*) which were used for building boats and house posts. Firewood was abundant. Trees were cut in planks and posts and sold in the

¹⁹ Originally published in the Forest Bulletin, no 33, hill, 1916. Indian Forester, volume 118, no.5, Nov. 1992, p. 344.

neighbouring markets. No forest revenue was obtained from the considerable trade in timber.²⁰

Cachar- The southern part of Cachar in the slopes of Borail range and in the extreme south that is the northern slopes of the Tippera hills had forest growth in abundance. The valuable species found there were khokon(duabanga dasycarpus), kurta (palaquium,benth) , ahui(vitex peduncularis) , ajhar and jarul(lagerstroemia flos-reginoe retz) etc . These were used for building constructions. The district had a developed revenue system accrued from forests which was derived by establishing custom 'ghats' on the river at which all the rafts being floated down had to pay a duty on different causes of forest produce.²¹

Goalpara- The Goalpara division contained good Sal (shorea robusta) forests. They were found in those areas where the rainfall was below 80 inches and the nature of sub soil drainage was good. But due to private ownership, the Sal forests of the district were in the verge of decline.²²

Kamrup , Nowgong and Darrang- In regard to these districts , the note emphasised on the role of Revenue Department . According to it, apart from handling over valuable Sal strands to the lower Assam tea company in Kamrup and destruction of rubber plants in Darrang by selling them to the highest bidder, the Revenue Department carried on excessive felling in Nowgong district due to which the trees stunted in growth and saplings were left.²³

Sibsagar and Lakhimpur- The forests of Sibsaigar districts were very much scattered but of better quality. In Lakhimpur , the forests between Saikhowaghat and Dibrugarh contained Simul (bombax malabaricum) in abundance which were

²⁰ H.P.Smith and C Purukayastha, A short history of Assam Forest Service, Shillong, 1946, pp.2-6 .

²¹ Ibid

²² Ibid

²³ Ibid

extensively worked by the upper Assam tea company's saw mills. Wholesale lumbering had followed the advent of tea planters in Assam.²⁴

Khasi and Jaintia hills- Extensive forests of pine were found adjacent to Shillong but were badly treated by the private owners. A fine Sal forests also existed in jirang adjoining Kamrup under the siem (khasi chief) of jirang.²⁵

Garo hills - Garo hills also contained a good quality of Sal forests. Jarul (*lagerstroemia flos- reginoe* Retz) was next in importance. The above species were used for constructing boats and house posts. Rs.2 was charged as royalty on the arrival at the depots and realised at the time of sale from the timber cutters or 'duffaders'. In addition to the royalties, the duffaders had to a small fee called 'murung' to the lashkars or headman of the Garo community to appease the deities under whose protection large Sal trees were supposed to grow. This was not a recognised levy at that time. After the division of Garo hills into clan areas, the fee was payable to the head of the clan called 'nokmas'.²⁶

The note further emphasised on detailed surveys, mapping out areas of commercially important trees and identifying parts of forests, which could be demarcated as reserves. In the year 1870-71, a special examination was carried on with the view to select reserves and measures were undertaken to start experimental timber plantations in Assam to meet the demands of the Public Works Department. Accordingly a number of plantations came up in Assam such as the rubber plantations in Charduar in Darrang district, the teak plantations at Kulsu in Kamrup and Makumtilla in Lakhimpur, and the Shillong plantation consisting of considerable amount of local pine, oaks, chestnuts, walnuts, eucalyptus, European and Himalayan pine, and crytomeria in Khasi and Jaintia hills.²⁷ At this period, the various forest qualities existing in Assam were classified into - (1) Sal forests (2)

²⁴ Ibid

²⁵ Ibid

²⁶ Ibid

²⁷ Progress report on the Forest Administration of Assam, 1874-75, Shillong, 1875, p.5. (NL)



Sissu and Khoir forests (3) mixed plain forests (4) mixed lower hills forests (5) pine forests and (6) mixed upper hills forests. ²⁸

The above classification was followed by several other classifications in the later years. Sir Dietrich Brandis, the Inspector General of forests in 1879 paid a visit to Assam and classified the forests into (1) savannah (2) Sal (3) Sissu and Khoir (4) mixed deciduous (5) evergreen (6) bamboo and lastly (7) cane breaks. ²⁹ Ten year later his successor Sir Berthold Ribbentrop made another classification where he retained the seven divisions made by Brandis and added an eighth one namely the pine forests. ³⁰ Some five decades later Mr M.C. Jacob, the Deputy Conservator of forests Assam revised the above classification into - (1) riverine (2) high land savannah (3) lowland savannah (4) Sal (5) evergreen (6) mixed deciduous and (7) pine. ³¹

On 7th February 1874, Assam was constituted as a Chief Commissioner's province with a separate Forest Department of her own created under the provisions of the Indian forest act of 1865. The province was divided into three divisions:

- (a) *Brahmaputra valley*- This division comprised of the districts of Goalpara, Kamrup, Darrang, Nowgong, Sibsagar, and Lakhimpur.
- (b) *Surma valley*- The districts of this division were Sylhet and Cachar.
- (c) *Areas under political control*- This division consisted of Garo hills, Khasi and Jaintia hills and Nagahills.

The Forest Department further subdivided the above into five divisions and placed under a Conservator of forests. They were Goalpara, Gauhati, Golaghat, Tezpur, and Cachar. ³² But there were certain limitations on the colonial claim over forests. The areas on which the British exercised limited control were:

²⁸ E.P.Stebbing, The Forests of India , vol 3, 1926, p. 216

²⁹ Deitrich Brandis, Suggestions regarding Forest Administration in Assam , 1879, p. 2 (NL)

³⁰ Berthold Ribbentrop, Note on the inspection of the forests of Assam, 1889.(NL)

³¹ M.C.Jacob, The Forest Resources of Assam, Shillong, 1940,pp 2-5.

³² Progress Report on the Forest Administration of Assam.1874-75. Shillong, 1875, p.4.(NL)

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- (a) The Zamindari forests in Goalpara, which were under the permanent settlement revenue system. The British could claim the products only from Karaibari parganas, Mechpara and Bijni estate³³.
- (b) In the hilly areas under political control, the Forest Department could not exercise its direct authority. It had to function with the aid of political officers.
- (c) The Colonial Forest Department had no direct hold over the forests of the princely state of Manipur.

The divisional charge of the above five divisions created by the Forest Department extended only over the reserved forests. The other forests were controlled by the Deputy Commissioners³⁴. Colonel Keating, the first Chief Commissioner of Assam while determining the aims and the purposes of the nascent forest department in the region was of the opinion, "The department is still in its infancy... The forest department at this command was too small for the management of extensive tracts of forests but the reserves under their control were schools where much could be taught and learnt. We should aim at something more than the conservancy of few reserves particularly protection from fire and jhumming of some 1500 square miles outside the existing reserves which form its geographical position and should in days to come supply the timbers of nearly all Eastern Bengal and yield a large revenue to the province"³⁵.



Section three: The initial phase of Colonial Forest Administration in Assam.

From the above view expressed by the Chief Commissioner, it is evident that the forest authorities were instructed from the very beginning to minimize the local use of forests. The British foresters were aware that such actions would lead to public dissatisfaction which according to them had to be tackled with proper farsightedness and planning in order to prosper their commercial aims in the region. To quote E.P.Stebbing, "Local requirements must become subordinate to the state of

³³ W.W.Hunter, Statistical Account of Assam ,vol 2,1879, pp24-27. and M.C.Jacob Forest resources of Assam, Shillong, 1940, p. 1.

³⁴ Progress Report on the Forest Administration of Assam, 1874-75, Shillong, 1875, p. 4. (NL).

³⁵ H.P.Smith and C Purukayastha, A short history of Assam Forest service, Shillong, 1946. p.9.

forests and the exigencies of conservancy. The converse of these had been the position of things and the results are obvious. If the interests of conservancy render it necessary that certain restrictions be put on the felling of certain kinds of trees, local supplies must be regulated accordingly... This will of course at first lead to dissatisfaction and complaints. The state of things is unfortunate. The present generation had to suffer for the errors and improvidence of the past, but better this now that the future generation find no forests at all”³⁶

The above picture was common with all parts of India. The natives were regarded as hindrance in the way of the exploitation of forests. In August 1855, a memorandum was issued for the first time which provided guidelines restricting the rights of the forest dwellers which was later on modified in 1884. The latter proclaimed public benefit and added that, “...in all most all the cases the constitution and the preservation of a forest involves, in greater or lesser degree, the regulations of rights and restrictions on privileges of the users in the forest area. It further mentioned that the reservation was done for greater public benefit and the cardinal principle to be observed was “...restrictions only in such a degree as are absolutely necessary to secure advantage.”³⁵

The initial phase of Colonial Forestry in Assam witnessed a gradual transformation in the attitude of the British foresters in regard to the indigenous use of forests. Although at the beginning, local use of forests was preferred to be restricted as possible, but hard and fast rules were less applied. Gradually with the establishment of strong foothold over the region, the rules of the Colonial Forest Department in the province become rigid and stricter. The gradual transformation can be cited through the various ‘jhum’ prohibitory measures adopted by the British at that time. They are as follows:

- (a) Initially the forest officials were of the view that ‘jhumming’ should be permitted to continue. Though it was considered destructive to forests it was

³⁶ E.P. Stebbing, *The Forests of India*, vol 2, 1923, p.415.

³⁵ The Old Forest policy circular no. : 22- F, Oct’ 19th 1894, 100 years of Indian Forestry, Forest research institute, Dehradun 1961, p. 337.

allowed to continue since a large portion of the population lived by this mode of cultivation which being congenial to their habits and prohibiting it entirely was not advisable for political reasons.³⁷

(b) In January 1874, a conference was held at Allahabad, which also dealt with the 'jhumming' issue of Assam. At this conference, the Chief Commissioner issued certain restrictions, which would make 'jhumming' less attractive and would compel the people to change over to permanent cultivation. The restrictions were:

(1) Whenever any house or poll tax paying village or any family of such village would change its residence and cultivation, the village or family must pay the double of the annual tax for the year of migration.

(2) Whenever such a village or family entirely would change the site of its cultivation without abandoning the site of its residence, the village or family must pay an additional tax of 50% above the ordinary annual tax for the year of change³⁸.

(c) In order to prevent 'jhumming' in the reserves, the Chief Commissioner of Assam issued a circular in 1874 to the forest officials to make distinctions between 'superior' and 'inferior' species and use their best endeavour to protect the former and surrender the later to the temporary cultivators.

(d) By 1875, the Forest Department adopted measures to establish its hold over the 'sacred groves' in parts of Garo hills and Khasi and Jaintia hills. These groves were supervised by religious heads called 'Lyndohs' or by the Khasi chiefs known as 'siems'. They often represented the climate vegetation of the districts. No timber or forest produce was removed for sale, trade or business purposes from these protected forests³⁹. In 1875, the Deputy Commissioner of Khasi and Jaintia hills in order to express his authority over the sacred groves of the region, called upon the Siems (Khasi chiefs) to prevent

³⁷ Progress Report on the Forest Administration of Assam, 1874-75, Shillong, 1875, p. 8. (NL)

³⁸ Report on the proceedings of the Forest Conference, Allahabad, 1873-74, Calcutta, 1875. (ASA)

³⁹ B.K.Tiwari, S.K.Barik and R.S.Tripathi, Sacred groves of Meghalaya, Biological and Cultural Diversity, 1999. National afforestation and economic development board . Regional centre, Shillong. p. 1.

'jhumming' within the groves which might cause damage to these religiously protected forests and take measures to mark off reserves⁴⁰.

- (e) In a circular no.33 dated 11th May 1876, the Chief commissioner of Assam, Colonel Keating drew upon the attention of all the Deputy Commissioners working in various divisions of Assam and especially the political agent of Naga hills regarding the enormous losses incurred in the province from jungle fires and expressed astonishment at the reckless way in which the people set fire to the jungle on all sides as soon as the wind springs up. He directed the Deputy Commissioners to impress upon the mouzaders, the headmen or the Zamindars and even up the ryots to prevent the occurrence of jungle fires and ordered that any carelessness in this regard would meet with serious consequences.⁴¹
- (f) In 1877, Colonel Keating further issued instructions on which he insisted on the insertion of a condition in the 'sunuds' (by which the selection of the siem or chiefs were acknowledged) to the effect that the siems would set aside any area that would be necessary or would be defined by the British government for the growth of trees to supply building timbers and firewood to the inhabitants of that particular state and would take sufficient measures to secure these areas from 'jhumming'. Under this order, certain parts of forests were selected for the growth of commercial species and a list was maintained by the Deputy Commissioner.⁴²
- (g) By the last decades of the 19th century, the position of the Forest Department in Assam was strengthened compared to the initial period with the issuing of various sets of forest laws including the Assam forest regulation 1891 which was meant exclusively for the province. Under section 10, chapter 2 of the Assam forest regulation 7th of 1891, the practice of 'jhum' cultivation was termed as a privilege rather than a right subject to the control, restrictions and abolition by the local government.⁴³

⁴⁰ E.P.Stebbing, *The Forests of India*, vol 3, 1926, p. 239.

⁴¹ H.P.Smith and C.Purukayastha, *A short history of Assam forest service*, Shillong, 1946.pp. 93-94.

⁴² *Ibid* p. 11.

⁴³ *The Assam forest manual The Assam forest regulation 7th of 1891, volume 1, Shillong, 1923.(ASA)*

(h) The Sylhet forest regulation of 1891 finally extinguished all 'jhumming' rights in the Sylhet division.⁴⁴

Moreover, during the period under review, the reserved forests in Assam were lesser in number and consequently the restrictions imposed were also minor in nature. By the 20th century, with increase in the number of reserved forests to meet the exigencies of wars and revenue, extensive restrictions and bans were imposed on the indigenous use of forests. The responses of the people towards the colonial forest policies were of varying nature, which will be discussed in the later part of our study.

In the previous section of this chapter, it had been stated that the forests of Assam were managed by a number of authorities namely the Deputy Commissioners, the P.W.D. and the Revenue Department prior to the coming of the Colonial Forest Department in the region. The latter at the stage of its inception in Assam was in favour of maintaining a harmonious relationship with the above authorities. Gustav Mann, the Assistant Conservator of forests, Assam, while preparing the first forest administration report on the province was of the opinion that the nascent department in the region should maintain a cordial relation with the civil authorities in order to make itself successful in the province.⁴⁵ The Deputy Commissioners in some parts of the region declined to support the Forest Department as the latter had curtailed their powers over the forests to a large extent especially in the reserved forests, although the unclassified state forests were under their jurisdiction. In this context, Gustav Mann had remarked, "None of the better forests are given up at all for cultivation until the government forests, both reserved and open are demarcated and this work carried out with much expedition as practicable, since without this there is always great danger of encroachment on the forests by the temporary cultivation or alienation of forests by lease or sale... The chief reason that the Deputy Commissioners have given so little support to forest

⁴⁴ Mohd Abu B Siddique, *Evolution of land grants and labour policy of the government*, 1990. p. 65.

⁴⁵ E.P. Stebbing, *The Forests of India*, vol 3, 1926. p. 226.

conservancy is that they do not understand the great influence it has on the welfare of the people and to exclude the civil authorities from it is not a wise policy.”⁴⁶

The British foresters from the very beginning had a strong anticipation that their policies would lead to public unrest and create a distance with other authorities exercising power over the forests. Therefore they were of the opinion that the Forest Department should entail the strongest government support in this regard. To quote E.P. Stebbing, “Conservancy will require the strongest support of the Government to enable it to resist the pressure which will from time to time be put against the forest department in the shape of all kinds of complaints, which, even with utmost care and foresight to prevent them, will always appear to have some sort of foundation and be supported by appeals to the hardships put upon the indigenous population...”⁴⁷

The revenue earning propensities of the Forest Department soon incurred the displeasure of the commercial concerns working in the province. In 1878, Sir Stewart Bayley, the Chief Commissioner of Assam stated, “The Chief Commissioner cannot but regret the policy under which the forest establishment in Assam is limited to the proportion of the revenue it secures. He is convinced that an increase in the establishment must eventually prove a safe investment while on the other hand the present system had an inevitable tendency to concentrate the energies of the department in increasing the revenue and endangering its harmonious relationship with P.W.D. and other purchasers”⁴⁸.

By the last decades of the 19th century, railways were started in some parts of Assam. In 1883-84, the construction of Dibru-Sadiya railways led to the opening up of the Lakhimpur division resulting in the extension of tea gardens. A large demand for tea boxes was created and a number of sawmills appeared in Darrang, Sibsagar and the Lakhimpur divisions. The Assam-Bengal railways had also gained momentum in Assam by that period. Consequently there was a rising trend in the growth of reserved forests, which could serve as stockades for timbers necessary for railway sleepers and other commercial enterprises.

⁴⁶ Ibid, p.226

⁴⁷ E.P.Stebbing, *The Forests of India*, vol 2, 1923, p. 415.

⁴⁸ H.P.Smith and C.Pupukayastha, *A short history of Assam forest service*, Shillong, 1946,p. 9.

The activities of the Forest Department directed towards commercial profits, however, did not appear to be lucrative in its trade in major forest produce with the railways and tea boxes manufacturing companies. In 1893, the Assam Bengal railways refused to accept the proposals of the Forest Department, which offered to provide a minimum supply of 30,000 sleepers at the rate of Rs 2-1-6 each⁴⁹. During this period, the Railway Company purchased Burma sleepers delivered at Guahati at Rs 3 each.⁵⁰ To this, the Chief Commissioner of Assam suggested that the situation would improve if the royalty rate was reduced. But the Conservator of forests rendered a different opinion. He had cited instances showing that the P.W.D and the Railways for reasons best known to themselves preferred to work through contractors and obtain supplies from outside the province. Thus according to him, the situation cannot improve as long as this attitude prevailed even if the cost was cheapened by reduction of royalty as suggested by the Chief Commissioner⁵¹. The Quinquennial Report on the Forest Administration of British India 1909- 1914 has dealt with some of the practical hindrances, in the growth of timber trade in Assam in the later part of the 19th century. They were:

- (a) Lack of knowledge about the natural resources of Assam existed in almost all parts of India due to which the railway companies preferred not to purchase railway sleepers from Assam during this period.
- (b) There were no proper export roads in the region and the timber reserves were inaccessible.
- (c) The absence of established markets for Assam timbers in Calcutta and elsewhere outside the province.⁵²

During this period the tea companies working in Assam were also in favour of exporting tea boxes from Norway, Japan, Austria, Russia, and England. Local tea chests were given the last preference. In 1897, with a view to compete with the imported tea boxes from Norway and Japan, the royalty on the local tea boxes was revised and introduced as follows- Anna 1 per large box, 9 pies per medium box, and 6 pies per small box. The reduction of royalty, however, could not prevent the

⁴⁹ Progress Report on the Forest Administration of Assam 1892-93. Shillong, 1893. p. 4.(ASA)

⁵⁰ Ibid, p.4

⁵¹ Ibid, p.4

⁵² Quinquennial Report on the Forest Administration of British India, 1909-10 to 1913-14, .Simla. 1915,p. 23.(ASA)

import of tea boxes from foreign countries. In 1899-90, the sale of local tea boxes gradually declined as the managers of the tea gardens were supplied with imported tea boxes by the Calcutta agents. According to the Conservator of forests, "This steady utilization of foreign boxes was not supposed to be owing to the fact that they were cheaper or better for the purpose required than the local article, but they preferred for some good reasons known by the Calcutta agents who practically have all arrangements for providing in their own hands"⁵³. R.S. Pearson in his note on the tea industry of Assam summed up the factors responsible for the above as follows:

- (a) The locally manufactured tea boxes in Assam were inferior to the imported boxes in terms of durability. According to Pearson, the inability of the saw mill owners to store locally prepared tea boxes for any length of time due to their liability to insect attack and their tendency to rapid decay were the factors responsible for the downfall in the demand for local tea chests.
- (b) Simul was the timber preferred by the tea planters for tea boxes in Assam. Simul trees situated within the vicinity of the sawmills in the Assam valley districts had already been destroyed due to excessive felling. Therefore, by the last decades of the 19th and beginning of the 20th century, the scarcity of timber and ever increasing distance over which it had to be carried to the saw mills posed to be a major hurdle in the prosperity of saw mills in Assam⁵⁴.

In order to give an idea about the position of affairs and the difficulties faced by the native saw mill owners, Pearson had cited an extract from a note given to him by Mr Moran of Sissi saw mill in Lakhimpur which may be quoted as follows: "The timber supply up to 1905 was within measurable distance from the mills. All the available timber along the banks and within accessible distance of the river (the only means of carriage) has been cut, since then to get Simul wood we had to go to Lalli, 76 miles from the mills, to Dehog and Debong some 90 miles and to Titcoria above Sadiya a distance of about 110 miles from the mills. The result being the cost of timber had quadrupled; we have had to work timber camps of our own. The loss of timber caused by sudden floods in the Brahmaputra is at times also great. In 1907,

⁵³ The Indian forest records .vol 5, part 1, R.S.Pearson, Note on the tea box industry in Assam, 1913, p. 23. (NL)

⁵⁴ Ibid, p.23.

our camps were several times raided by the Abors, and it is difficult to get native contractors to work on the Lalli and Debong rivers. There are Simul trees in the areas near the above named rivers but the distance from the water ways and the cost of carriage is great, and it is almost impossible to bring them out, the expense being prohibitive.”⁵⁵

Thus the infrastructure of Colonial forestry in Assam in the 19th century had to face a number of practical resistances which impeded the growth of the department in the province till much later years. As a result, the initial phase of Colonial Forestry did not appear to be smooth in the region. The Goalpara Sal-working plan introduced in 1893-94 was a failure due to lack of labour⁵⁶. The plantation programmes on which the British laid great premium at the initial stage was discouraged by the last decades of the 19th century and no further expenditure were recommended on it. In 1881, the Chief Commissioner of Assam rendered the opinion, “The experimental plantations of teak and rubber are of doubtful value and though the Chief Commissioner is hopeful that they will succeed and would not like to see them abandoned, still he is of the opinion that they should not be greatly extended.”⁵⁷ The Balipara rubber tree plantation had cost from Rs 10,000 to 12,000 in 1881 and not less than a lakh of rupees by 1891 without returning anything to the treasury. It could possibly be a mine of wealth some 25 to 30 years hence while on the other it could turn out to be a total failure. Therefore the Chief Commissioner discouraged speculative expenditure on plantations. Nambor plantation was stopped in 1890-91. By 1893-94, the teak plantation at Kulsu was put to an end because from an analysis of cost and extended revenue, it was not considered a good financial proposition.⁵⁸ During this period, the colonial efforts to introduce ‘taungya’⁵⁹ as a replacement to ‘jhum’ cultivation was also not successful.⁶⁰

⁵⁵ Ibid, p.10.

⁵⁶ Regulation of the falling of trees other than Sal, Goalpara Division, Assam, 1896. (NL)

⁵⁷ H.P.Smith and C.Purukayastha, A short history of Assam forest service, Shillong, 1946, p. 12.

⁵⁸ Ibid

⁵⁹ Taungya is the system of cultivating trees of commercial significance with the crops grown in the ‘jhummed’ areas. In Assam, the British adopted this system to counter ‘jhum’ cultivation. This method of cultivation is actually of Burmese origin.

⁶⁰ E.P.Stebbing The Forests of India, vol 3, 1926, p. 242.

In terms of revenue however, the results were on the whole satisfactory. Though the revenue received was not very high, but the amount exhibited a rising trend. The receipts for 1883-84 and 1884-85 were Rs 2,11, 445 and Rs1,80,403 while the expenses were Rs 1,99,562 and Rs1,97,667 respectively. In 1889-90 the receipts were Rs 3, 79,498 and the expenditure was Rs 2,57,129. The receipts had dropped to Rs 3, 36,129 in 1891-92 but further increased in 1899-1900 when the revenue received was Rs 5, 68,100. On this, the Inspector general of forests remarked, "The gross revenue and surplus were the highest yet realised in Assam."⁶¹ Assam being the most backward province in India in forestry matters, the colonial foresters at this period did not expect large amount of forest revenue from the province. Therefore, they were satisfied after receiving the above financial results and were of the opinion that this improvement can be attributed to the colonial forest administration introduced in the province.⁶²

In 1878, the Indian forest act of 1865 operational in Assam was replaced by the Indian forest act of 1878. Though the act was intended for the whole country but it was soon caught up into controversy. The Chief Commissioners of Burma and Madras declined to accept the act declaring that the rights of villages over wastelands and jungles were of such a nature as to prevent the government from forming independent states property. To take care of the situation they preferred to come up with local legislations.⁶³ In response to this situation, a local legislation came in Assam in 1891 known as the Assam Forest Regulation which repealed the act of 1878 in the province. Though the Assam Forest Regulation was especially meant for the region, but it showed little sensitivity for the rights of the native people. It instead empowered the local government in this regard with the following:

- (a) To stop any public or private way or water course in a reserved forest,
- (b) To impose penalties for trespass or damage to the forest,
- (c) To prohibit any fresh clearing or breaking of land for cultivation or any other produce,
- (d) To regulate or prohibit the cutting of trees for 'jhum',

⁶¹ Ibid

⁶² Ibid, p.242.

⁶³ Berthold Ribbentrop, Forestry in British India, 1900, reprint 1989, p. 101.

- (e) To impose duty on and regulate transit of forest produce,
- (f) To arrest without warrant suspected offenders against a reasonable suspicion exists,
- (g) To seize or impound the cattle or goods involved in the offence⁶⁴.

In 1898, Lushai hills was incorporated in Assam as a scheduled district and a frontier tract. The district had little to offer in terms of natural resources and the forests were highly mixed in composition and located in the remote locations. Despite this, the incorporation of Lushai hills within Assam and British union of India was considered necessary by the British to protect the interests of their subjects and commercial establishments in the neighbouring plains and as a measure of security between the colonies of India and Burma. The district was placed under a political officer. The forests of the region was put under two authorities. The Cachar forest division exercised authority in the shared border while the political officer of the district managed the forests in the mainland of the Lushai hills. In the context of Lushai hills, a significant fact can be noticed that the reserved forests were also established as a measure of protection. In 1877, a huge reserve known as Inner line reserve consisting of about 509 square miles on the northern boundary with Cachar was created and was managed by the Cachar forest division. In 1904 this reserve was territorially transferred from Cachar to Lushai hills district as a measure of protection of the Cachar plains from the gruesome raids of the Lushais.⁶⁵

In 1904, the province of Assam was reconstituted under the title of East Bengal and Assam and the Bengal districts of Jalpaiguri, Buxa and Chittagong was incorporated within it. During this period, two Conservators exercised power over the forests of the region and the divisions were divided into two circles according to administrative convenience. However, this system of administration continued only up to 1912 when again political changes occurred and Assam achieved the status of a separate province. Major developments towards scientific management of forests took place in Assam after the outbreak of the First World War.

⁶⁴ The Assam forest manual The Assam Forest regulation 7th of 1891, vol 1, Shillong, 1923.(ASA)

⁶⁵ Daman Singh, The last frontier: people and forests in Mizoram, Tata Energy Reseach Institute. Delhi.1996.pp. 28, 38, and 39.

Conclusion

The initial picture of the establishment of Colonial Forest Department in Assam in the later half of the 19th century was similar in its preliminary aspects with the rest of India. Like the other parts of the country, the ideological concern for desiccation had played the major role in shaping the Forest Department in the province. The mobile forest users especially the jhum cultivators were held primarily responsible for forest destruction in the region and measures were undertaken to curb the practice. The British foresters held the view that the indigenous people as well as the various departments of the British government such as the Public Works Department and Revenue Department etc had caused grave damages to the forests of Assam by their mismanagement of forest lands. Therefore, a separate organisation was urgently required for exercising systematic management over the forests of the region. Under these circumstances the Forest Department in Assam came into being.

After the establishment of the Colonial Forest Department in Assam in the later part of the 19th century, the material concern for revenue became the primary consideration of the Department. The indigenous forest users were preferred to be kept out of the scene as they were considered as hindrances to forest reservation in the province. The basic difference which the Colonial Forest Department in Assam had at the initial phase in comparison to other parts of India was that it had to function under certain restrictions in the province. Till the first decades of the 20th century, Assam was an obscure region in terms of her natural resources, people, topography, and climate to the rest of India. Rivers were the only means of communication in the region with few Kuccha (unmetalled) roads. Due to these reasons, there were no markets for Assam timber in Calcutta or elsewhere in the province till the second decades of the 20th century. Consequently the trading concerns such as the railway companies and the saw mills during that period declined to enter into any trading contracts regarding railway sleepers and tea boxes with the Forest Department and the latter had to run under losses. It was only after the First World War that Assam timber began to gain momentum in other parts of India. Apart from the above, the Colonial Forest Department in Assam in the 19th

century had to function in harmony with other departments in the region. It had to perform its tasks keeping in view the interests of the civil authorities, Revenue Department and Public Works Department as they had exercised authority over the forests of Assam prior to the advent of the Colonial Forest Department in the region. Functioning in accord with other departments was the first criteria of the Forest Department to be successful in the region.

The 19th century policies of the Colonial Forest Department in Assam in regard to the native tribes of the region also had some particular characteristics. In the initial years of colonial forest administration in the region, no stringent measures on the use of forest resources were imposed on the tribes. The rigidity of the forest laws had began to be gradually increased with the establishment of strong foothold of the Department over the region. During the period under review, raids by the hill tribes on the plains and valley areas of Assam was an important problem faced by the British authorities. In order to deal with the issue, forest reserves were created in Assam as a measure of protection. This was a significant fact noticed in the case of colonial forest administration in Assam. These reserves, apart from serving as a store house for timber, also acted protective barriers between the hills and the plains. In 1877, the Inner Line reserve was created in Lushai hills consisting of about 509 square kilometres on the northern boundary with the Cachar division to protect the Cachar plains from the gruesome raids of the Lushais. In 1904, the Inner line reserve was transferred to the authority of the Cachar plains.

The Colonial Forest Department in Assam which had its inception in the later part of the 19th century gained its foothold over the province by the second decades of the 20th century especially after the outbreak of the First World War. The process of commercialisation of forests received further impetus with the outbreak of the Second World War.

CHAPTER TWO

COMMERCIALIZATION OF ASSAM FORESTRY: 1912-1945

By the second decades of the twentieth century, a gradual transformation was noticed in the administrative nature of Colonial Forestry in Assam. From a feeble condition surrounded by a number of practical hindrances, the Colonial Forest Department in the region rose to new heights as an institution of yielding revenue to the imperial government. During this period, the forests of Assam witnessed a number of scientific developments like creation of working plans, economic surveys and researches, silvicultural practices and protection measures etc. But these developments were much slower in pace and inferior in quality in comparison to other parts of India. To quote E.P. Stebbing, "Assam is the most backward state in India in forestry matters."¹ As had been discussed in the previous chapter, in the later part of the 19th century, the civil and the revenue authorities did not give a welcome support to the nascent Forest Department in the region and the trading concerns such as the railway companies and tea box industries declined to enter into any trading contracts with them. Timber trade in Assam was next to impossible as there were no market for Assam timber in Calcutta or elsewhere in the province. Lack of information regarding the natural resources of Assam played a potent role in this regard. Due to all these factors, the Forest Department experienced a great financial stringency during this period. A native newspaper from Calcutta titled "Dainik Chandrika" of 20th may 1911 wrote as follows, "In the first place, the budget of the province of Assam shows a deplorable shortness of revenue, a state of things that had been continuing in the province since its creation"². Till the last decades of the 19th century, very poor measures were undertaken to develop transport and communication in the region. Only few roads existed in Assam, some in Cachar and Kamrup while others in Goalpara, which only in Assam had an excellent road system. The working plans laid out for the province did not reach beyond the elementary stage, researches and surveys were discouraged as that would incur expenditure and retrenchment in the composition of forest staff was a regular

¹ E.P. Stebbing, *The Forests of India*, vol 3, 1926, p. 626.

² Report on the Native Newspapers, may- aug 1911, p. 326. (NAI)

phenomenon. Moreover the continuous political and administrative changes of Assam in the later half of the 19th and beginning of 20th century greatly disturbed the process of establishment of strong colonial hold over the forests of the region. The attainment of the position of separate province in 1912 was the first step of the Colonial Forestry towards stability in Assam.

The outbreak of the First World War in 1914 played a remarkable role in bringing about significant changes in the administrative nature of Colonial Forestry in Assam. Due to the war, India could no longer depend on imported products but had to be self-supporting and self-sufficient. The war Quinquennial Report of 1914-1918 noted, "The increased demand for timber and other forest products brought about by the war has undoubtedly greatly stimulated Forest Department in the Indian empire, and large schemes of reorganization are under consideration"³ Along with other provinces of India, forest trade in Assam received great fillip as a result of the war. The period after the 1914-1918 war up to 1929-1930 is regarded as the boom period for Colonial Forestry in Assam. The various developments that had taken place in the 20th century (1912-1945) can be studied under the following heads:

Section One: Conservation

On 1st April 1912, the forests of Assam were divided into two circles namely the Eastern circle and the Western circle according to administrative convenience. The Eastern circle consisted of the divisions of North east frontier tract, Lakhimpur, Sibsagar, Naga hills, Nowgong and Darrang while the western circle comprised of Sylhet, Cachar, Kamrup, Goalpara, Garo hills, Khasi and Jaintia hills and Lushai hills districts. Both the circles were placed under two Conservators. But by the year 1925, the post of the Second Conservator was held in abeyance due to financial stringency, which existed in spite of the boom brought about by the First World War. To this, E.P.Stebbing remarked, "The Assam government had recently suggested (1925) the holding in abeyance of the second post of Conservator, and the proposal had been forwarded to the Secretary of state – a rather retrograde step, for Assam is the most backward province of India, and its permanent divisions into two

³ E.P.Stebbing, The Forests of India, Vol 3, 1926, p. 271.

circles should result in the great forests of this province being opened out in the light of modern practice.”⁴ The various measures adopted to constitute state forests in Assam can be studied under the following sections:

(1) Constitution of state forests.

According to the Indian forest act of 1878, the forests of Assam were divided into (a) reserved forests and (b) unclassed state forests. Section 72 of the Assam forest regulation of 1891 further empowered the local government to create forest villages in Assam whereby its inhabitants would contribute a specific number of workdays labour to the Forest Department for the maintenance and improvement of government forests.⁵ Several criterions were taken into consideration while classifying the forests into the above divisions. They were:

Reserved forests

- (a) Reserved forests consisted trees of commercial significance which were well preserved so that they could be exploited in times of need and could act as a source of revenue.
- (b) No local use was allowed in these forests.
- (c) Emphasis was laid on the creation of these forests in those areas near which there were no villages.⁶
- (d) The reserved forests were under the direct supervision of the forest authorities.
- (e) As these forests were managed by trained staff of the Forest Department, they were worked under carefully working plans.⁷
- (f) Reserved forests also functioned as protection forests, which were preserved to prevent soil erosion, floods and conserve water supplies. According to British Post war forest policy on India, “In a very hilly country like Assam, the proportion of these forests must be higher than in a flat country as there are

⁴ Ibid p, 267.

⁵ The Assam Forest manual The Assam forest regulation 7th of 1891.,vol 1, Shillong ,1923, pp 7-10(ASA)

⁶ H.P.Smith and C.Purukayastha, A short history of Assam forest service, Shillong, 1946, p. 21.

⁷ Progress Report on the Forest Administration of Assam 1874--75, Shillong 1875, p. 4 (NL).

more steep faces of hills to safeguard and more springs and sources of streams and rivers to protect.”⁸

- (g) Another proposal was laid while forming the reserves according to which suitable blocks of forests scattered among the villages should be reserved to meet the timber demands for future and named as ‘fuel reserves’. Some fuel reserves were created in the Lakhimpur division and later on termed as village forests placed under the supervision of the village authorities. However, the concept of such villages was unsuccessful in Assam as large-scale depletion of forests began to take place.

Unclassed state forests

- (a) Unclassed state forests generally did not consist trees of commercial importance. In rare cases, trees having commercial value were found in these forests.
- (b) Local uses such as hunting and grazing were allowed in these forests and the government earned a substantial amount from grazing from these forests.
- (c) No restrictions existed on issuing trade permits and ‘mahals’⁹ in these forests.
- (d) The unclassified state forests were theoretically under the control of the Forest Department but no intensive system of management with the object of a sustained perpetual supply of timber or other produce were adopted in regard to these forests. These forests were under the supervision of the Deputy Commissioners.¹⁰

Forest villages

- (a) Forest villages were villages created within the forests and the villagers were entitled to provide labour to the Forest Department in lieu of free use of forest products.
- (b) These villages were preferred to be established in those places where labour was not available.

⁸ H.P. Smith and C. Purukayastha, A short history of Assam forest service, Shillong, 1946, p. 70.

⁹ Mahals were partitions within forests for the purpose of hunting elephants by means of stockades or ‘kheddahs’. Mahals also existed in the extraction of rubber from forests.

¹⁰ M.C. Jacob, The Forest Resources of Assam, Shillong, 1940, p. 1.

- (c) People skilled in sawing timber, climber cutting and working as coolies were imported from outside and recruited as labourers by the Forest Department. These people were settled in these villages.
- (d) The concept of establishing forest villages in Assam was given serious thought after the introduction of the Goalpara working plan which gave the idea that the development of the forests of Assam was impossible without the annual recruitment of labour from outside. Accordingly 66 miles of the Ripu Mouza reserve in Goalpara district was handed over to the Forest Department for the establishment of forest village in 1901. The second oldest forest village in Assam was the Longai forest village in the Sylhet division established in 1902.¹¹
- (e) Forest villages were also created in reserved forests but only in those parts which did not have rich forest cover.

(2) Growth of reserved forests.

From 1912 extensive tracts of forests were declared as reserved and unclassed state forests. As has been mentioned, the reserved forests fulfilled a number of commercial aims of the Colonial Forest Department while in comparison to that, the functions of the unclassed state forests were limited in nature and were more directed towards public use. Therefore during this period great emphasis was laid on the growth of reserved forests in Assam. In the year 1912, the region had 4321square miles of reserved forests. There was a considerable area of unclassed state forests out of which 15000square were expected to be brought under reserve and 12000square miles were declared as unclassed state forests¹². In the following year, some 40square miles of forests in the Sibsagar division were transferred to Naga hills for being demarcated as reserved. In the North East frontier tract, forests near Sadiya and Pasighat were declared as reserved by executive orders.¹³

In 1914-15, Mr Simeon the Assistant Conservator of forests and in charge of Khasi and Jaintia hills made a tour of the northern part of the district and discovered

¹¹ Progress Report on the Forest Administration in Assam 1901- 02, Shillong, 1902, p. 3. (NAI)

¹² Progress Report on the Forest Administration of Assam 1911-12, Shillong, 1912, pp. 1-2. (NAI)

¹³ Progress Report on the Forest Administration of Assam 1913-14, Shillong, 1914, pp. 1-2 . (NAI)

some fine Sal forests existing over there. He suggested the preservation of these trees and proposed that the forests of Jirang and Nongkhylllem reserves should be divided into blocks and only one block should be opened for felling at a time. He also found a good deal of Sal forests in the khyrim division and recommended that 'jhumming' should be prohibited in the area. Mr Simeon further emphasized on the preservation of the forests in the vicinity of Umiam Lake near Shillong which should be free from 'jhumming', grazing, felling of trees, and hunting¹⁴. During the year, an Assistant Conservator of forests was deputed for Lushai a hill which was so long under the District superintendents and political officers.¹⁵

In the following year an area of 320 acres of forests were added to the divisions of Cachar, Sylhet, Goalpara, and Kamrup for reservation and 6 acres were protected in the North East frontier tract under executive orders.¹⁶ In order to augment the growth of reserve forests, it was suggested that suitable blocks of unclassed state forests should be converted into reserve. According to the proposal, "The large areas of unclassed state forests cannot be considered as a private forest estate as it is from this class that settlement and recolonization of Assam will be met. Though the process is as yet comparatively speaking only a beginning yet it is processing at a considerable rate. At the same time large areas in the hills are being permanently denuded of forest growth due to unrestricted 'jhumming' of increasing intensity. It is most advisable to select and reserve the forest cover in accessible positions which will ultimately be necessary to provide the coming population with their requirements of fuel, grass and grazing besides building timber. Such areas may ultimately be found to be more essential to the people than forests producing large timber; executive orders may lapse from neglect or reserved on the opinion of an individual but de-forestation of an area once reserved requires reconsideration."¹⁷

The outbreak of the First World War played a significant role in the growth of reserved forests in Assam in the second decades of the 20th century. In 1917-18, noteworthy additions were made to the protected forests of North east frontier tract

¹⁴ Progress Report on the Forest Administration of Assam 1914-15, Shillong, 1915, p. 2. (NAI)

¹⁵ Ibid, p. 24.

¹⁶ Progress Report on the Forest administration of Assam 1915-16, Shillong, 1916, p. 2.(NAI)

¹⁷ Ibid, p. 21.

along the right bank of Brahmaputra and the area was raised to 240 miles.¹⁸ By 1921-22, several additions were made to the reserves of Kamrup, Sylhet and Sibsagar divisions.¹⁹ Within the next two years 137 squares of forests were handed over to Nowgong, 9 square miles to Sibsagar, 70 square to Naga hills and 5 square miles to the Kamrup divisions.²⁰ The growth of reserved forests in Assam in the 20th century can be charted out from the following table;

GROWTH OF RESERVED FORESTS	
Year	Area in sq. miles
1911-12	4,344
1912-13	4,321
1913-14	4,381
1922-23	5,601
1923-24	5,814
1925-26	5,937
1926-27	6,011
1928-29	6,105
1929-30	6,147
1931-32	6,145
1932-33	5,186
1934-35	6,264
1938 -39	6,492

Source: Progress reports on the Forest Administration of Assam 1911-12 to 1938-39 (NAI and ASA).

By the later part of the period under review, certain portions of forests were reserved for the preservation of wild life. During this period a number of wild life sanctuaries came up in Assam, which apart from preserving the wild beasts also acted as an important source of revenue. Mr. Milroy, the Conservator of forests, was responsible for initiating a comprehensive scheme for the management of sanctuaries and formation of new ones. The following extract from the Forest Administration Report of 1933-34 submitted by him explains the position of things during that time, "The question of game preservation was gone into thoroughly during the year and a note has been submitted to Government. The rhinoceros is

¹⁸ Progress Report on the Forest Administration of Assam 1917-18, Shillong, 1918, p. 2.(NAI)

¹⁹ Progress Report on the Forest Administration of Assam 1921-22, Shillong, 1922, p. 3. (NAI)

²⁰ Progress Report on the Forest Administration of Assam 1923-24, Shillong, 1924, p. 3.(NAI)

already being effectively protected in the Monas sanctuary of 159 square miles, and measures are being taken to ensure its protection in the Kaziranga sanctuary of 165 square miles.”²¹ By the end of the year 1945, the area of reserved forests in Assam rose to 6,773 square miles, which included 459 square miles of forests dedicated to the preservation of wild life²².

By the end of 1945 the area of reserved forests in Assam rose to 6,773 square miles, which included 459 square miles of forests dedicated for the preservation of wild life. It was emphasized that the unclassed state forests, which supplied more than 50% of timber during that time, should be brought under further reservation. The reason was to ensure the supply of timber available from unclassed state forests, which according to the British authorities might deplete sooner or later with the process of settlement in accessible areas and the practice of ‘jhumming’ in the less accessible areas.²³

With the beginning of the Second World War period, vital importance was laid on the reservation of forests as large areas of forests were depleted to meet the demands of the growing population for firewood and building materials, etc. The various deforestation measures taking place due to the War played a significant role in this regard. In 1944-45, there were agitations in Sylhet and Cachar to clear the forests of certain parts of those places so that aerodromes could be constructed to meet the war needs.²⁴

The proportion of reserved forests in Assam in the 20th century was considered inadequate by the colonial foresters. According to them, the number of reserved forests in the province should be increased. The most significant factor that acted as a hurdle according to the British authorities in this regard was the lack of finances. The Quinquennial Report in the province of Assam for the year 1934-35 to 1938-89 noted, “There has been an increasing and understandable insistence that

²¹ Progress Report on the Forest Administration in Assam 1933-34, Shillong, 1934, p. 3. (NAI)

²² Resolution on the Forest Administration in the province of Assam for the year 1944-45 (PRFAA1944-45) Shillong, 1947. (NL)

²³ Progress Report on the Forest Administration of Assam 1944-45, Shillong, 1947, p. 5. (NL)

²⁴ Ibid

Assam's forest wealth should be reserved for exploitation ...but the chronic lack of capital remains a serious obstacle to the successful prosecution of this aspiration."²⁵

(3) Growth of forest villages.

The forest villages in Assam constituted under section 72 of the Assam forest regulation of 1891 were inhabited by imported labourers and native tribes who worked for the Forest Department in return of free privilege for using forest products. Due to reservation of forests, the natives were bound to desert the area thus reserved resulting in scarcity of labour for the British government for working in the forests of those areas. Consequently, the British authorities established forest villages in order to deal with this problem. The forest villages consisted of basically the Nepali immigrants who were also graziers and the native tribes such as the Kacharies, Mikirs, Nagas, Daflas, Garos among others. A small number of sawyers from Chotanagpur were also included in the population.

In 1912-13, Goalpara had 37 forest villages and four of them were sanctioned to Garo hills.²⁶ In the following year one forest village was established in Kamrup and another in the Darrang division²⁷. By the beginning of the third decades of the 20th century, 31 new villages were sanctioned to the forests of Assam.²⁸

According to the rules framed for the forest villages, they were designed for the purpose of providing a suitable source of labour and for forming and maintaining plantations. Their duties included timber cutting, measures for fire protection, climber cutting, demarcation of boundaries, construction of roads and acquisition of timber from remote and inaccessible areas. Significantly, no castes who were habituated to living and working in the forests were eligible for admission. Duties were assigned according to the inclination of the labourer. For instance, the Nagas were recruited for felling trees in the tea gardens without causing damage to the

²⁵ Quinquennial Report on the Forest Administration of Assam for the year 1934-35 to 1938-39. Shillong, 1939, p. 6 (NL)

²⁶ Progress Report on the Forest Administration of Assam 1912-13, Shillong, 1913, p. 31. (NAI)

²⁷ Progress Report on the Forest Administration of Assam, 1913-14, Shillong, 1914, p. 27. (NAI)

²⁸ Progress Report on the Forest Administration of Assam 1923-24, Shillong, 1924, p. 23. (NAI)

young tea plants because they had their indigenous method of doing it. The forest villagers in the Goalpara division contributed immensely in the extension of the Goalpara tramway work.²⁹ In exchange of the duties allotted to them, the forest villagers were granted some concessions. They had the privilege to cultivate land at lower rates of revenue, could use forest products from reserved forests, and had free grazing rights. Each adult labourer when called upon was supposed to render 20 days labour to the Forest Department per annum. The rule also authorized the Divisional Forest Officer to summarily evict from the village, without payment or compensation, anybody who did not comply with the norms or refused to carry out his orders.

The duties mentioned above were never very popular among the forest villagers. As meagre amount of cash payment were made to them, they often expressed reluctance to work for the Department. In 1927-28, the activities of the forest villagers in the Garo hills and Goalpara division were found to be unsatisfactory and it was felt that the forest village rules in the Goalpara division needed urgent amendment³⁰. With this aim in view in 1929-30, an Enquiry Committee was appointed to deal with the issues of forest villages.³¹

However, the indispensability of these forest villages was a fact that the forest department had to recognize and thus the Indian Forest act of 1927 emphasized on the establishment of limited number of forest villages within the reserved forests. Each family was entitled eight hectors of land to clear and cultivate and also to keep five heads of cattle.³² By the period 1935-46, we find a large number of forest villages being sanctioned to Assam due to the influx of peasants from East Bengal.

²⁹ Ibid.

³⁰ Progress Report on the Forest Administration of Assam 1927-28, Shillong, 1928, p. 19. (NAI)

³¹ Progress Report on the Forest Administration of Assam 1929-30, Shillong, p. 18. (NAI)

³² A.C.Sinha Beyond the trees, tigers and tribes, New Delhi. 1993, p. 61.

(4) Protection from Cattle

In the 20th century, grazing posed a serious problem to the colonial foresters. The number of graziers in the region was on an increasing trend. They basically consisted of the settled agriculturists in the Brahmaputra valley, some of the native tribes such as the Monpa and Sherdukpan tribes of Northeast frontier and the Nepalese immigrants settled as labourers in the forest villages. The graziers paid a fee to the government for grazing which was an important source of revenue to the civil authorities in the unclassed state forests and the Forest Department in the reserved forests. All parts of reserved forests were however not opened to grazing as it was considered harmful for the growing of trees. The British government had put forward a number of detrimental impacts caused by grazing to forests³³. They were: (a) It destroyed the rich organic matter of the topsoil layer. As a result the nutrients were washed away and soil productivity was destroyed. (b) It decreased infiltration due to loss of vegetation and litter cover. (c) The porosity of soil declined. (d) It increased bare ground. (e) Regeneration was also severely damaged by grazing.

In 1912 a conference was held at Shillong between the civil and the forest authorities regarding the grazing issue in Assam where it was decided that grazing grounds would be provided to the herdsmen and a grazing fee at a lower rate be imposed on the cattle so that they cannot move from one place to another without special permission. These grazing grounds were prevented from being used for cultivation³⁴. During that year 1,976 square miles of forests in the eastern circle was closed to grazing while 470 square miles were opened to it. The grazing fee for buffaloes was Rs. 1 and four annas for cows in North Cachar hills³⁵.

In the following years, the number of graziers increased manifold in Assam. The continuous influx of the Nepalese graziers as settled labourers in the forest villages were regarded as a threat by the Forest Department. Damage of crops by cattle grazed by the Nepali graziers was the constant complaint made by the cultivators during this period. Moreover, the forest villagers and settlement holders

³³ Indian Forester. vol 121, no 7, July 1995 ,p. 717..

³⁴ Progress Report on the Forest Administration of Assam 1911-12, Shillong, 1912, p. 6.(NAI)

³⁵ Ibid p. 10.

had free grazing in the reserved forests. In 1913-14, an area of 10,666 square miles of unclassified state forests with exceptions in Goalpara and Khasi and Jaintia hills were opened for grazing in order to deal with the emerging problem. An I.C.S. officer was decided to be employed to deal with the grazing issue in Assam.³⁶ By the end of 1921-22, the control of grazing was transferred to the Land Revenue Department as the grazing fees paid fell into arrears and the Forest Department was unwilling to keep an account of the credit receipts³⁷. During the year the total receipts from revenue amounted to Rs. 3, 41, 499.³⁸

In the year 1939-40, rotational grazing schemes came up in Assam to deal with the grazing issue where 7 acres per buffalo and 2 acres per cow were provided to the graziers. A livestock expert was appointed who suggested that the Forest Department should limit the number of useless cattle by increasing and providing areas for the cutting of fodder for stall-feeding. The expert further opined that in the forest plantations, fodder grasses should be grown between the plant lines. This was considered as a large opening for business that would provide fodder for stall-feeding particularly to the towns.³⁹ M.C.Jacob, the Deputy conservator of forests, Assam made an analysis of the number of cattle that grazed in reserved forests in the year 1940. According to him, approximately 20,000 buffaloes, 5000 cows and 200 goats and sheep grazed annually in the forest reserves of different parts in the province.⁴⁰

(5) Protection from fire

Putting of fire in forests had been an integral part of the tribal life of Assam. The people burnt forests for cultivation, hunting small game, clearing paths and tracts to avoid snakes, safeguarding the villages and crops against tigers, elephants, and boars, killing of insects, destruction of weeds, and securing fresh pastures and thatch grass crops, etc. In the later of the 19th century, when the Colonial Forestry

³⁶ Proceedings of the Chief Commissioner of Assam in the Revenue department, No 5109R , 21st Dec 1914.(ASA)

³⁷ Quinquennial Report on the Forest Administration in the province of Assam 1919-20 to 11923-24, Shillong, 1924,p. 8. (ASA).

³⁸ Ibid

³⁹ M.C.Jacob, The forest resources of Assam , Shillong,1940, p. 11.

⁴⁰ Ibid.

came into existence in Assam, the above appeared to be serious obstacles in the way of the British foresters. The most important among the above was 'jhum' cultivation. The latter was considered as the greatest impediment to forest conservation in Assam. Along with the various measures adopted to curb 'jhum' cultivation, the imperial foresters started fire protection in the province in 1890. The protection measures included controlled burning under which the forest floor was deliberately burnt in a particular season so that wholesale damage could be avoided. This was the fire run through the forest floor as soon as dead leaves were dry enough to be burnt but sometime intentionally fire was also put when it was desired to kill the evergreen undergrowth to facilitate regeneration.⁴¹

The impact of fire protection on forests had been of varied nature. E.P.Stebbing had put forward a number of advantages and disadvantages created by fire protection on the forests of Assam.⁴²

Advantages

(a) Fire protection dehydrated the clay soil and consequently ameliorates its texture. (b) It stimulated regeneration by encouraging rapid growth of new shoots as it fertilized the soil temporarily. (c) It increased potash content in the soil and promoted bacterial activity. (d) It destroyed fungal attack on the new shoots. (e) It increased insects and unwanted weeds. (f) It promoted mineral salts and alkalis for the nutrification of plant residues. (g) From the economic point of view, burning was cheaper than cutting.

Disadvantages

(a) Fire protection destroyed nitrogen content in the soil. (b) Uncontrolled destroyed superficial root content and certain amount of regeneration. (c) It required intensive care while burning which might be disastrous if unconsciousness was adopted in regard to the work.

⁴¹ Hundred Years of Indian Forestry, vol 2 , 1861-1961, Forest Research Institute, Dehradun. p. 156.

⁴² E.P.Stebbing, The Forests of India, Vol 3, 1926, pp. 400-401.

In 1914-15, areas of 1051 square miles of forests were brought under special fire protection.⁴³ No fire protection measures were adopted in the 'Sal' forests of western circle. Fire protection had a contrary effect on the regeneration of 'Sal' in the Goalpara division as it facilitated the growth of evergreen shoots, which impeded the growth of 'Sal' trees. During this period, great premium was laid on the preservation of 'Sal' as it was considered the most important from the revenue point of view.

From the year 1915-16, fire protection was abandoned in the Goalpara division. Mr W.F.Perry, the architect of the Goalpara working plan 1906-07 was of the opinion, "The interesting fact in connection with the Goalpara forests is the gradual suppression of 'Sal' logs by an evergreen growth which has been favoured by the protection of fire. At present time, with the exception of some of higher levels on which a grass undergrowth still prevails, the natural regeneration of 'Sal' has practically ceased.....In Kamrup the best 'Sal' forests which are on the northern belt of Khasi hills have been extensively worked in the past, and the 'Sal', as in Goalpara has ceased to regenerate itself under prolonged fire protection."⁴⁴

The abandonment of fire protection was however adopted in regard to the preservation of 'Sal' while in the evergreen forests such policies were not followed. In 1917, Cachar, Krungmin and Mupa reserves were brought under effective fire protection at the cost of Rs 537⁴⁵. The 'Simul' reserves in the eastern circle were provided with special fire protection. Till 1925-26, fire protection existed only in Khasi hills near Shillong while in other parts of Assam it was given up.⁴⁶

(6) Silviculture

The beginning of silvicultural practices was an over due to the forests of Assam since the inception of Colonial Forest Department in the region. Due to financial stringency existing in the economy of the region, it was not started till the

⁴³ Progress Report on the Forest Administration of Assam 1914 -15, Shillong, 1915, p. 9.(NAI)

⁴⁴ E.P.Stebbing, The Forests of India, vol 3,1926, p. 399.

⁴⁵ Progress Report on the Forest Administration of Assam 1916-17, Shillong, 1917, p. 9.(NAI)

⁴⁶ E.P Stebbing, The Forests of India ,vol 3, 1926, p. 399.

3rd decades of the 20th century. But its necessity was felt while executing commercial measures in the forests of the province. In this context Mr. C.J.Rowbotham correctly wrote, "The revenue was collected without much more outlay of expenditure other than that involved in the upkeep of revenue stations on river banks. Continual skinning of the forests within easy elephant dragging distance of the banks of rivers, without any silvicultural improvement of the growing stock, brought the forest department to realize that the previous state of affairs could not continue indefinitely and that the ever decreasing revenue must in course of time diminish to such an extent that it would no longer pay to maintain a large staff of forest officers , working only in the revenue stations merely to tax the timber trade."⁴⁷

The introduction of silvicultural practices in the forests of Assam began after the outbreak of the First World War. It was the first step towards modernization as well as commercialization of Assam forests. Scientific principles were applied for the first time for natural regeneration in this period of the 20th century. In 1929, a silviculturist cum botanical officer was appointed in Assam for systematic silvicultural research. Up to 1930, the chief items of work carried out were (a) the classification of state forests by types (b) the laying out of experiments on natural regeneration (c) the increments of plots⁴⁸. It was realized that careful selection of sites, sowing of valuable species best suited to the locality and their subsequent tending were the essential factors for success. Plantation schemes were again taken up and 'Taungya' method of cultivation was regarded as an integral part of the plantation programme. In 1921, the Conservator of forests gave orders to commence plantation of teak under 'Taungya' method in the Cachar division⁴⁹. The total area regenerated artificially at the end of 1943-44 was 28,955 acres of which about half the area was done by 'Taungya'. By the year 1944-45, much work was done in the systematic botany of Assam resulting in the compilation of the 'Flora of Assam'⁵⁰.

⁴⁷ Ibid, p. 424.

⁴⁸ Progress Report on the Forest Administration of Assam 1929-30, Shillong, 1930, p. 25.(NAI)

⁴⁹ Progress Report on the Forest Administration of Assam 1920-21, Shillong, 1921, p. 5.(NAI)

⁵⁰ Progress Report on the Forest Administration of Assam 1943-4 , Shillong ,1944 ,p. 3 and Resolution to the Progress Report on the Forest Administration of Assam 1944-45, Shillong, 1947.(NL)

However, due to monetary crisis in the slump period of 1930's and because of the paucity of forest officers, the post of the silviculturist had to be retrenched which remained vacant during the Second World war also

Section two: Resource extraction in Assam.

Resource extraction for commercial purpose formed the most important element of British forestry programmes in Assam. The Colonial Forest Department in the region was an integral part of the British government whose chief ambition laid in the exploitation of Indian resources and accruing of revenue. In this context, Lord Curzon, the most influential and reactionary among the viceroys of India remarked, "I look upon the Englishmen in this country as engaged in different branches of the same great undertaking, my work lies in administration, yours in exploitation but both are aspects of the same questions."⁵¹

The various forest laws enunciated by the British were dedicated to the commercialization of forests bringing newer strategies of doing so into usage. According to the National Forest policy of 1894, "Forests are the reservoirs of valuable timber which should be managed on commercial lines as a source of revenue to the states." Apart from this, the law also emphasized on the proper demarcation of reserves so that it did not hamper the growth of permanent cultivation.⁵² This measure was given priority in order to maintain cordial relation with the Revenue and Agricultural Department. The strategies of colonial forest extraction in Assam in the first half of the 20th century can be studied under the following sections:

(1) Development of Transport and Communication

Most of the timber forests of Assam were topographically situated in those inaccessible positions where there were no communication networks. Prior to the coming of modern communication system, the main agency of forest extraction in Assam was the river Brahmaputra and its numerous tributaries. Few 'kuchha' (unmetalled) roads existed in Assam through which the elephants dragged the timber logs to the riverbanks. After the advent of Colonial Forest Department in Assam and

⁵¹ S.T.Das, Tribal life in North Eastern India, Habitat, Economy, Customs, and Traditions, New Delhi, 1986, p. 15.

⁵² Vesant Desai, Issues in Agriculture and Forestry, 1984, pp. .301-302.

discovery of valuable forests in the region, serious thoughts were given to promote and develop transport and communication in the province. The 'Sal' strands in the Goalpara division were considered of prime commercial importance and first step necessary was the introduction of better extraction facilities.

The establishment of the Goalpara Tramway project was the most remarkable measure adopted by the Colonial Forestry in the field of forest extraction in Assam. Some parts of the Kochugaon forests in the Goalpara division consisted of some fine 'Sal' species but were situated in waterless tracts and the exploitation of the bulk of the area was impossible until a short length of tramway was laid through the forests. The government of Assam pressed for larger revenue from these forests and the construction of the tramway project was considered primely important.

The proposal for the construction of a tramway of 2 feet was submitted in 1899. After its sanction, a length of two and half miles was laid out in 1901-02 and by extensions year after year, the total length amounted to about 20 miles in 1911-12⁵³. Trolleys were operated by manpower at first and steam traction was sanctioned in 1913-14⁵⁴. The tramway tract transported timber logs to the Gerufela river from where they were floated to different centres of consumption. In 1921-22 it was decided that the tramway project would be extended up to Fakiragram, a railway station on the Eastern Bengal railway as the Gerufela River became unsuitable for floating due to silting⁵⁵. By 1925 the total length of 17 and half miles of the Kochugaon – Fakiragram section of the Goalpara tramway was completed⁵⁶ and the forests hitherto considered unworkable were opened up. The tramway not only extracted timber from the reserves but also brought a considerable quantity of timber from Bhutan.

The success of the Goalpara Tramway project encouraged the government to sanction a 5 years road scheme for forest communication in 1909 -10 and since then cart roads began to appear in Assam. Thoughts were also given to start tramway projects in other parts of the province. According to a native newspaper titled 'Silchar' of 15th June 1901, serious views were expressed to begin a tramway

⁵³ Progress Report on the Forest Administration of Assam 1911-12, Shillong, 1912.,p. 4. (NAI)

⁵⁴ Progress Report on the Forest Administration of Assam 1913-14, Shillong, 1914, p. 4.(NAI)

⁵⁵ Progress Report on the Forest Administration of Assam 1921-22, Shillong, 1922, p. 12. (NAI)

⁵⁶ Progress Report on the Forest Administration of Assam 1924-25, Shillong, 1925.(NAI)

communication between Salchapra and Hailakandi in the Cachar division to augment local trade as traffic by river was hazardous during the rainy season.⁵⁷ The success of the Goalpara tramway project in the extraction of forest resources in Assam can be measured by the following table:

STATEMENT SHOWING THE WORKING OF THE TRAMWAY BETWEEN 1924-25 TO 1944-45				
Year	Quantity of logs extracted by the Tramway.	Revenue	Maintenance Charge	Surplus or Deficit
	Cubic feet	Rs.	Rs.	Rs.
1924-25	1,24,154	82,215	31,436	50,779
1925-26	2,61,165	1,47,277	57,768	89,509
1926-27	3,92,336	2,34,066	1,01,109	1,32,957
1927-28	2,54,256	2,99,411	1,19,448	1,79,963
1928-29	3,68,168	1,93,643	88,984	1,04,659
1929-30	3,44,962	91,348	1,54,774	63,426
1930-31	3,72,764	58,146	93,595	35,449
1931-32	1,99,879	1,17,644	87,655	29,989
1932-33	60,378	19,645	31,375	11,730
1933-34	1,23,366	45,272	36,661	8,611
1934-35	1,22,462	41,371	31,282	10,089
1935-36	1,16,144	47,365	26,573	20,792
1936-37	1,34,163	35,739	24,717	11,022
1937-38	2,28,511	36,346	25,726	10,620
1938-39	2,34,900	55,712	30,007	25,705
1939-40	1,65,971	44,123	36,294	7,829
1940-41	1,73,460	50,564	35,064	15,500
1941-42	96,651	32,404	28,924	3,480
1942-43	1,62,996	42,766	35,027	7,759
1943-44	1,53,757	31,958	43,009	-11,051
1944-45	2,50,752	51,578	1,00,089	-48,511
Total	43,41,195	17,58,593	12,19,517	5,39,076

Source :H. P. Smith and C. Purukarastha – 1946, op. cit. pp 60-6.

The prosperity of the Goalpara Tramway project , however, began to show a downward trend with the advent of the World Wide Depression of 1930's. During this period, with the development of cart roads, carting rates were dropped in

⁵⁷ Reports on the Native Newspapers, 6th July 1901, p. 537. (NAI)

Assam. The Gerufela River once again became suitable for floating timber and the contractors found it economical to transport logs by floating to Fakiragram. At that time Saptagram was the main market for logs and the Eastern Bengal railway was extended to this place. In the meantime heavy expenditure had been incurred in replacing wooden beams of the bridges by steel girders, ballasting of tracts and replacement of sleepers, raising of embankments in places, purchase of new engines etc and consequently the tramway began to show less profit⁵⁸.

(2) Minor Forest Produce

Minor Forest products in Assam represented a variety of forest products namely rubber, ivory, skins and hides, jute, bamboos, wax, thatching grass, canes, honey and lac, etc. These had been an important source of revenue to the British Forest Department in Assam in the 20th century.

Bamboos: Bamboos formed an integral part of the tribal life of Assam. It grew in great sizes and varieties in most parts of Assam like the Lushai hills, Naga hills, Khasi and Jaintia hills, Cachar and North Cachar hills. The division of Cachar produced the largest amount of bamboos in India. The tribal people residing in the region consumed bamboos for a variety of purposes such as for building of fences, posts, roofs and walls of houses, and as fuels, etc. The growth of bamboos had an intimate connection with the 'jhum' cycles of the native tribes. Bamboos grew in abundance in the lands left fallow after 'jhum' cultivation⁵⁹. In the Lushai hills, a land covered with bamboos was regarded as most suitable for 'jhum' cultivation as bamboo ash was considered to be a good fertilizer⁶⁰. Bamboos had great significance in Assam during the Ahom period. At the time of the coronation ceremony of the Ahom rulers, a bamboo platform was created on which the royal couple took their seats⁶¹. Bamboos contributed considerably to local trade in the pre-colonial period as well as in the initial phase of the colonial rule in Assam. The British authorities

⁵⁸ H.P.Smith and C.Purukayastha, A short history of Assam forest service, Shillong, 1946, p. 61.

⁵⁹ Tanmay Bhattacharjee, Kanch Samvad , 1998, p.129.

⁶⁰ B.C.Allen , Gazetteer of the Khasi and Jaintia hills, Garo and Lushai hills , reprinted 1980 , p. 25

⁶¹ Sir Edward Gait, A History of Assam, 1905, p. 235.

earned a good amount of revenue from trades in bamboos with Dacca, Sylhet and Maimensingh.

Bamboo as a commercial product began to gain significance in Assam by the end of the first decades of the 20th century. During this period the forests of Assam were in the process of opening up to the rest of India due to development of transport and communication, and the impetus to forest trade brought about by the First World War. Establishment of markets occurred and emphasis was laid on acquiring more information about the resources of the region. In 1910-11, investigation for the first time was made into the varieties of grasses existing in Assam of which bamboos formed an integral part. Specimens of Khagri grasses were sent to experts for examination which after being tested opened up as a vast source of material⁶². By this time, paper pulp industry had gained huge significance in the country and steps were taken to find out the resources that would contribute to the growth of this industry. Investigations were also made into the suitability of various timbers, grasses and bamboos in Assam for the production of paper pulp. However, the decision was given in favour of grasses by the beginning of the second decade of the 20th century. In 1911-12, Mr Rait, the expert on grasses, remarked, "The investigation of wood for the present has been postponed in favour of grasses." He was of the opinion that a certain species of bamboo named *Melocanna bambusoides*, the only common species available in Assam could be commercially used for paper pulp industry.⁶³ Accordingly a scheme was undertaken to establish a paper mill in Assam. With the discovery of the commercial significance of bamboos in Assam, measures were adopted to prohibit the cutting and burning of bamboo trees in the unclassified state forests.⁶⁴ During the Second World War, trade in bamboos fetched high prices to the government.

Rubber: Rubber had been an indigenous product of Assam since times immemorial. The local name for rubber in Assam was 'Bor Attah' which the inhabitants used to

⁶² Progress Report on the Forest Administration of East Bengal and Assam 1910-11, Shillong, 1911, p. 14.(NAI)

⁶³ Progress Report on the Forest Administration of Assam 1911-12, Shillong, 1912, p. 19.(NAI)

⁶⁴ Progress Report on the Forest Administration of Assam 1939-40, Shillong, 1940, p. 12. (NL)

water proof their baskets and to burn as candles. It was first discovered in Cachar in 1862⁶⁵. Till the 19th century much emphasis was not given on the rubber species growing in Assam as the colonial authorities had the notion that rubber was exclusively an American product. In December 1836, Dr Royle, a British official stationed in Assam, wrote a letter to the Agricultural and Horticultural society of India and provided information about the rubber species growing in the region. He also informed the London Caoutchouc Company about the rubber trees growing in Assam and urged for starting rubber cultivation in the province. After much investigation a report was submitted which presented a highly complimentary account stating, "no doubt can be entertained that Assam rubber is quite capable of competing with any part of the world and it only remains to be ascertained what quantity the country is equal to production."⁶⁶

Rubber as a minor forest produce began to gain momentum in Assam with the advent of British administrative machinery in the region. At this period the exploitation of rubber was carried on in the form of 'mahals'. But soon it was discovered that a number of malpractices existed in the process like over-tapping of trees leading to the destruction and smuggling of rubber. A number of native tribes such as the Khamtis and Singphos of Lakhimpur and Abors and Mishmis of North east frontier tract were largely engaged in collecting rubber. During this period several private speculators appeared on the scene who purchased rubber from the native tribes in lieu of high prices. As a result the home government was unable to earn any profits from the process. The imperial foresters like Gustav Mann, Dr T Anderson and William Schlich suggested that the imposition of tax of a certain amount on per maund of rubber and establishment of rubber plantations in suitable areas would improve the condition. In the 1870's William Schlich suggested that a tax of Rs 5 should be levied per maund of rubber which would bring about Rs. 50,000 to the government. He further held the opinion that the amount should be utilized for expanding rubber plantation in Assam⁶⁷.

⁶⁵ W.W.Hunter, Statistical Account of Assam . vol 2. 1879. pp 370-371.

⁶⁶ Proceedings of north east India history Association, 8th session , Kohima ,edited by Jayanta Bhushan Bhattacharjee , p. 231.

⁶⁷ E.P.Stebbing, The Forests of India, 1926, Vol 3, p.219.

By the beginning of the 20th century, rubber plantation was extended to different parts of Assam. In 1914-15, the Charduar rubber plantation in the Kamrup division was extended by 50 acres. But from the financial point of view, the year was far from satisfactory. The expenditure on rubber was Rs. 9,37,432 while the receipts were only Rs. 9,32,295 and thus there was a deficit of Rs. 5,137.⁶⁸ During this period although the revenue accruing from it was low, Assam rubber was in great demand in Europe with large amounts being exported to London.⁶⁹ The demand for Indian rubber however began to decline with the outbreak of the Second World War when the English markets became flooded with Para rubber in low prices. After the downfall of Assam rubber market no measures were taken to replenish the rich product. On the contrary reckless extermination of rubber trees by over tapping almost led to the extinction of this invaluable product by the end of the Second World War⁷⁰.

Faunal Resources: A considerable amount of revenue was realized by the Department from faunal resources. The latter basically consisted of elephant tusks, rhino and deer horns, shooting and fishing permits, etc. Among the above, the Forest Department earned the most from trades in elephant tusks used for making statues and ornaments. In 1917, elephant tusks valuing Rs. 2,263 were collected from the western circle.⁷¹ The amount was raised to Rs. 1,84,250 in the next twelve years.⁷² Another source of income from elephants was their capture in 'kheddah' and 'mela' shikar operations. The 'kheddah' method was that of rounding up herds of elephants into a stockade and resulting in the capture of all sizes of elephants while the 'mela' method was for trained elephants to chase and noose wild elephants and generally only the smaller ones are captured. In this context it would be worthy to mention that elephant catching had been in vogue among the native tribes of Assam from the pre-colonial period. The Raja of Susang in Garo hills possessed an elephant 'kheddah' in which a considerable number of elephants were caught annually⁷³. In

⁶⁸ Progress Report on the Forest Administration of Assam 1914--15, Shillong, 1915, p. 13.(NAI)

⁶⁹ Progress Report on the Forest Administration of Assam 1917-18, Shillong, 1918. (NAI)

⁷⁰ Progress Report on the Forest Administration of Assam 1939-40, Shillong, 1940, p. 52.(NL)

⁷¹ Progress Report on the Forest Administration of Assam 1917-18, Shillong, 1918. (NAI)

⁷² Progress Report on the Forest Administration of Assam 1930-31, Shillong, 1931, p.34. (ASA)

⁷³ W.W.Hunter, Statistical Account of Assam , vol 2 , 1879, p. 145.

Garo hills, a substantial trade on wild elephants was in existence since the pre-British period and expert hunters used to come with their trained elephants for 'mela' shikar operations⁷⁴. At this period, bones and hides of elephants were articles of commerce and had a good market in the neighbouring plains. The Rajas of Tippera, Cachar and Manipur were dependent on the Lushais for elephant hides, bones and tusks⁷⁵. With the advent of colonial administrators in Assam, the government asserted its rights over the elephant stockades of the native rajas and 'mela' shikar operation was prohibited in the various districts of Assam. The Deputy Commissioner of Garo hills district was of the opinion that elephant catching operations in his division would yield from 150 to 200 animals for sale and would prove to be a lucrative source of income⁷⁶.

Elephant catching operations in Assam exhibited the most upward trend only during the Second World War. During the World Trade Depression of 1930's elephant catching operations showed a downward trend when the revenue derived from it was only Rs. 77,300.⁷⁷ The amount further lowered down in 1934-35 when it was only Rs. 32,562⁷⁸. Just prior to the Second World War, the price of elephants had deteriorated considerably due to the advent of motor cars. But during the war period, the price of elephants suddenly rose beyond expectation to meet the needs of army. Some fabulous prices ranging from Rs.3000 to 6000 per animal were obtained from new captures⁷⁹.

After the occupation of Burma in 1942 as a consequence of the Second World War, demands for minor forest produce was increased to an incredible extent to meet the requirements of army and its auxiliary services fighting along the borders of Assam. The magnitude of importance of the minor forest produce of Assam can be gauged from the following revenue figures of 1941-42. During the

⁷⁴ Ibid

⁷⁵ Subhas Chatterjee, Mizoram under British rule, New Delhi , 1985, pp . 186-187.

⁷⁶ Ibid

⁷⁷ Progress Report on the Forest Administration of Assam 1930-31, Shillong , 1931, p. 34.(ASA)

⁷⁸ Progress Report on the Forest Administration of Assam 1934-35, Shillong, 1935, p. 35. (ASA)

⁷⁹ M.C.Jacob, The Forest Resources of Assam , Shillong, 1940, p. 8.

year out of Rs. 5,10,091 worth of revenue, Rs. 3,34,383 was from minor forest produce. The amount was from the following items.⁸⁰

(a) Cane	Rs. 1,24,447
(b) Bamboos	Rs. 1,06, 102
(c) Thatching grass	Rs. 35,340
(d) Elephants	Rs. 51,081
(e) Lac	Rs. 17, 413
(f) Total	Rs. 3,34,383

(3) Major Forest Produce

Major forest produce basically consisted of timber required for manufacturing railway sleepers, tea boxes and matches, bridges, posts, boat building and for constructing cart wheels etc. Since timber was the major source of revenue, it was termed as major forest produce. Assam produced a number of timber species like Sal (*Shorea robusta*), Nahor (*Mesua ferrea*), Khoir (*Acaciacatechu*), Hollock (*Terminaliamyriocarpa*), Hollong (*Dipterocarpusmacrocarpus*), Jarul and Ajhar (*Lagerstreamia flos-regine*) Simul (*Bombax malabaricum*), etc.

Among the above, Sal grew in Darrang, Khasi and Jaintia hills, Goalpara, Kamrup, Nowgong and Garo hills.

Ajhar and Jarul grew in Garohills, Kamrup, Nowgong, Sibsagar, Sylhet, Cachar, Darrang and Khasi hills.

Hollock and Hollong; Hollong grew in hilly background and in parts of Nagahills, Sibsagar and Cachar. While Hollong grew in North east frontier tracts, Lakhimpur, Nowgong, Sibsagar, Khasi and Jaintia hills, Cachar, Goalpara and Garo hills.

Nahor; These trees were common and gregarious in all the evergreen forests of Upper Assam.

Khoir; grew in Sadiya, Darrang, Kamrup and Goalpara.

Simul; grew in Lakhimpur, Darrang, Sadiya and North east frontier tract.

Apart from the above timber species, various other timber trees also grew in Assam.

⁸⁰ Progress Report on the Forest Administration of Assam 1940-41, Shillong, 1941, p. 32. (NL)

The variety of marketable commodities manufactured from the above mentioned timbers can be listed as below:

- (a) Railway sleepers – Sal, Nahor, Ajhar, jarul, Hollong, and Hollock Posts – Khoir, Ajhar, Jarul and Nahor Bridges – Sal, Ajhar, Jarul and Hollock.
- (b) Cart wheels – Sal, Ajhar, Jarul, and Khoir
- (c) Boat building – Simul, Ajhar, Jarul, and 'Sal'.
- (d) Packaging cases and matches – Simul.

Methods of timber extraction

Exploitation through departmental agency was done only for extracting timber for railway sleepers. Timber extracted in the form of logs was the rule in Lower Assam and Surma valley districts. In Lower Assam, forest sawing for railway sleepers was usually done through recruited sawyers from Nepal. In both the Lower Assam and Surma valley districts, elephants were mainly employed for extracting logs and transporting them to river banks. In Lower Assam districts, the employment of elephants was of recent origin which began only in the 20th century as a substitution to buffaloes. Tramways only existed in Goalpara while in the rest of Assam carts were usually the means of transport.

Trade in Railway sleepers

The advent of railways in India in 1850's played the most significant role in commercializing the forests of our country. It emerged as a lucrative substitution to the boat building industry in terms of timber utilization. At the initial phase of railways in India, wooden sleepers were imported from Norway and Burma which was a costly proposition for the British. There were less chances of profit as half the amount was spent on their transportation to India. The establishment of the Colonial Forest Department in our country may be traced to such imperial commercial interests too.

With the advent of the Forest Department in every province of India by the end of the 19th century, the British government recognized its hold over the forests of those areas as a source of revenue, timber and several other forest products. As

regards the railway sleepers, deodar, teak, and Sal trees of northern Himalayas played a major role in fulfilling the demands of the railway companies at the initial period.

The discovery of 'Sal' forests in Assam in the later part of the 19th century enhanced the scope of the sleeper manufacturing companies. However, till the second decades of the 20th century Assam timber had little demand in market. "Sal' was only regarded as the tree having commercial significance while the various evergreen species existing in Assam forests had little importance. The forests of Assam during this period represented an impenetrable cover of trees with very poor transportation and acute crisis of labour. William Schlich, the Conservator of Bengal forests at that time was not at all optimistic about the future of Assam forests in terms of revenue and timber trade possibilities. According to him, "The prospects of utilizing surplus stock of timber by exporting it are slight, with the exception of 'Sal'. The great bulk of good and rich forests are situated in Upper Assam, and moreover, the greater portion of Sam (*Artocarpus Chaplasha*) is found in remote places where very little labour is available. The consequence is that the expenditure in removing the timber is too high in proportion to its value, none of the mixed plain and lower hill forest tree yielding really first class timber."⁸¹

However with the beginning of the 20th century, the demand for railway sleepers increased manifold and the valuable stocks available in Assam forests were taken into consideration. In 1912, railway sleepers contributed to about 60% of the total forest revenue of Assam. But the price offered by the railway companies to Assam timber was so unremunerative that in 1912 the authorities of the Goalpara forest division made representation to the Eastern Bengal state railways for an increase in the price offered to them. Consequently the railways agreed to pay 23% to the above formerly paid⁸². The enhancement of price was however not sufficient to meet the labour wages and the expenditure involved in sawing operations. In

⁸¹ E.P.Stebbing, *The Forests of India*, vol 3, 1926, pp. 220-221.

⁸² Progress Report on the Forest Administration of Assam 1912-13, Shillong, 1913.(NAI)

1914-15, there were no major 'Sal' operations for sleepers⁸³. By the end of the First World War, the demand for railways had increased to a great extent and a new system based on cubic foot basis was imposed on the Ajhar trees in Sibsagar division for the manufacture of meter gauge sleepers as a measure for increasing the amount required for timber operations⁸⁴.

The railway sleepers in Assam included three main categories - broad gauge sleepers, meter gauge sleepers, and tram sleepers. The major railway companies acting as customers to Assam forests were Assam Bengal Railways, Eastern Bengal State Railways, and the Jorhat Railways. The areas of timber operations were Darrang, Sibsagar, Kamrup, Goalpara, and Garo hills division. In 1921-22, 1264 'Sal' trees in Kamrup division were converted into 11,546 railway sleepers. During the year departmental timber operations were started in Garo hills for the first time⁸⁵. Till this period 'Sal' was only given priority for the manufacture of railway sleepers. The various evergreen species were used only when there was acute scarcity of 'Sal'. The following extract from the resolution of the Forest Administration Report for the year 1926-27 reveals the extent of importance attached to 'Sal' and the insignificance accorded to evergreen species, "Even as late as 1925, although the forest revenue and surplus has expanded owing to the completion of the Goalpara forest tramway and the systematic working according to plans previously prepared for the Goalpara 'Sal' forests, 'Sal' was still the only timber for which there was any effective demand, the rates obtainable for other varieties being so low as to make it essential that working charges should be reduced to the minimum."⁸⁶

However the situation entirely changed within the next five years. The so called 'useless' evergreen forests of 1925 contributed to about 60% of timber by 1929-30 and 75% of the total timber revenue of the province. The increase of the value of evergreen forests can be attributed to the following:

⁸³ Progress Report on the Forest Administration of Assam . 1914-15, Shillong , 1915, p. 4.(NAI)

⁸⁴ Progress Report on the Forest Administration of Assam 1919-20, Shillong, 1920, p. 6.(NAI)

⁸⁵ Progress Report on the Forest Administration of Assam 1921-22, Shillong, 1922, p.20.(NAI)

⁸⁶ Progress Report on the Forest Administration of Assam 1926-27, Shillong, 1926-27.

- (a) The opening up of the Creosoting plant at Naharkatiya for treatment of non durable species for use as railway sleepers. In 1929-30, 2,22,000 sleepers were treated by the Naharkatiya Creosoting plant⁸⁷. In the following year, railway sleepers of various species numbering 2,11,359 were purchased from Lakhimpur and Sibsagar division and were given to the Naharkatiya Creosoting plant for treatment. These sleepers were supplied to the Assam Bengal railways.⁸⁸
- (b) Marketing of miscellaneous species to meet the demand brought about by the First World War.
- (c) General improvement of communication. By 1929-30, the Goalpara 'Sal' operation for railway sleepers had stopped owing to bad timber market as a result of the great Depression of 1930's.⁸⁹

The demand for Assam timber increased to an incredible extent after the outbreak of the Second World War. According to the Forest Administration Report of 1940-41, "The direct results of the War supply demand have been not only to bring additional revenue to the province, but to encourage and develop local enterprise in the shape of expansion of the business of established timber traders by the erection of small saw mills, development of the business of small contractors and the taking up of this branch of this industry by newcomers."⁹⁰ Assam forests played a significant role in the Second World War. During this period, the mixed forests of Assam attained commercial importance for the first time. The war created demand for substitutes and it was realized that timber species growing in Assam were as good as those imported for special purposes. The various trees used only for local needs such as the *Chichrassia tabularis* was found to be very good for air screws, *Aglaia edulis* proved to be suitable for tool handles, and *Mesonia dipikae* was considered good for making boots.⁹¹

⁸⁷ Progress Report on the Forest Administration of Assam 1929-30, Shillong, 1931, p. 11.(ASA)

⁸⁸ Progress Report on the Forest administration of Assam 1931-32, Shillong, 1932, p. 12. (ASA)

⁸⁹ Progress Report on the Forest Administration of Assam 1928-29., Shillong, 1929, p. 21.(NAI)

⁹⁰ Progress Report on the Forest Administration of Assam 1940-41, Shillong, 1941.(NL)

⁹¹ H.P.Smith and C. Purukayastha A short history of Assam forest service, Shillong, 1946, pp 43-44.

Saw mills and the manufacture of tea boxes

The origin of saw mills in Assam can be traced from almost the same time as the inception of Tea industry in the region. The oldest saw mills of Assam were the ones situated in Dehingmukh and Badarpur which were established in 1850's. After the introduction of Dibru- Sadiya Railways in 1883-84, Lakhimpur division was opened up by railways and there was large extension of tea cultivation. Consequently there was an increased demand for tea boxes which was met by the establishment of a large number of saw mills. By 1889-90, there were nine saw mills in Lakhimpur, one at Muringial near Golaghat and one at Darrang. Simul (*Bombax Malabaricum*) was considered the most suitable for tea boxes and therefore saw mills were preferred to be created in those areas which had 'Simul' trees in abundance. The simul producing areas of Assam were Lakhimpur, Darrang, Sadiya and North-east frontier tract.

The saw mill industry since its beginning in Assam did not prove to be a lucrative enterprise. Imported tea boxes had always supplemented the locally manufactured tea boxes in terms of sale and durability. In spite of royalty concessions given in the previous period, the sale of local tea boxes did not improve, though they were as good as and cheaper than imported ones. The latter had a firm hold over the Calcutta market from where the managing agents of Assam tea gardens preferred to purchase the boxes.

On 22nd August, 1912, it was decided that no royalty would be imposed on timber purchased for tea boxes⁹². However the above was only a temporary proposition and royalty was re-imposed in 1914-15 when the market had improved owing to the First World War. In 1916-17, a large number of Simul trees felled in Lakhimpur, Darrang and North-east Frontier tract areas for manufacturing tea boxes under the royalty system. But soon this system was found unsatisfactory and the system of royalty per logs was reintroduced.⁹³

⁹² Progress Report on the Forest Administration of Assam, 1911-12, Shillong, 1912, pp 9-12. (NAI)

⁹³ Progress Report on the Forest Administration of Assam. 1916-17, Shillong, 1917, p. 21.(NAI)

In the last decades of the 19th and beginning of the 20th century, a number of saw mills came into existence in Assam. But very few of them could survive the odds of competition posed by the imported tea boxes. The period of 1920-25 was a lean phase for saw mill industry in Assam. A large number of saw mills went into liquidation during this period. Some of them were:

- (a) Naharkatiya saw mill which ceased to work in 1914.
- (b) The Surma valley and Lakhimpur saw mill in Cachar which went into liquidation in 1922.
- (c) Bhanga saw mill at Sylhet for manufacturing plywood tea boxes was closed down by 1923.
- (d) Furkating, Hopewell, Sissi, Tezpur, and Saikhowa saw mills ceased to work by 1924-25.

The only saw mills which made good progress at this period were the Murkongsellek saw mill in Sadiya and Margherita saw mill in Lakhimpur. During this period the saw mills started using 'Hollock' and 'Hollong' timber as the availability of Simul timber was becoming scarce. In 1924, a match factory was established at Dhubri in connection with the Swedish match company. It grew as a well established factory which consumed a monthly amount of 50,000 tons of soft wood.⁹⁴

With the outbreak of the Second World War, saw mill industry in Assam began to show signs of revival. During the year 1938-39, seasoned timber began to be used for manufacturing tea boxes. The restrictions imposed on imported boxes due to war led to the emergence of a number of saw mills to meet the war demands. A number of saw mills were established, three at Digboi, one at Sylhet, one at Rangapahar, two at Jeypore, and four at Makum junction. But these saw mills were smaller in size and had poor quality of machinery.⁹⁵ As a result they could not make much progress towards earning profits.

⁹⁴ Report on the Forest Utilization and Economic research in Assam 1935-36.(ASA)

⁹⁵ Progress report on the Forest Administration of Assam , 1938-39, Shillong, 1939.(NL)

(4) Creation of the post of Forest Utilization Officer

The creation of the post of Forest Utilization officer was a significant measure in the process of forest extraction in Assam. On 1st July 1935, the post of Forest Utilization Officer in Assam was sanctioned in order to effectively deal with the vast tracts of forests existing in the region. The main duty of the Forest Utilization Officer was to secure contracts and arrange for supply through contractors of different divisions. He also acted as a liason officer between the various firms of Calcutta and the Divisional Officers concerned. He advised the contractors on commercial matters, adopted measures and did necessary propaganda for pushing Assam timber and other forest produce in outside markets⁹⁶.

The creation of the post of Forest Utilization Officer had fully justified the appointment. Extraction of forest resources of Assam had increased manifold resulting in the expansion of export trade and creation of markets for species which had no commercial use previously. The Forest Utilization Officer also dealt with the freight questions with the railways and the steamer companies. In the year 1935-36, samples of eleven varieties of timber of Assam having economic importance to His Royal Highness the prince of Wales and to the technical school of Jorhat. A thorough study on Hollong, Hollock and Simul timbers were undertaken so that they could be improved as the prosperity of the saw mill industries in Assam were dependent on them. Therefore we find that during this period, the veneer mill at Margherita used more than two lakhs cubic feet of Hollong timber for manufacturing tea boxes. At the same year, the Indian paper pulp industry limited took 2000 tons of dry splits of the following bamboos from Surma valley of which about 75% were removed from government forests and the rest mainly from tea gardens. The above mentioned bamboos were Muli (*Melocanna bambusoides*), Pecha (*Dentrocalamus haniltonii*), and Khang (*Dentrocalamus longupathus*)⁹⁷.

In March 1937, a forest utilization conference was held at Dehradun with the aim of getting an all India view of the activities of the Forest Utilization Officers working in different provinces. The conference was attended by Mr Sasi Mohan Deb, the Forest Utilization Officer of Assam at that time. At the conference it was emphasized that ways and means should be adopted to reduce railway freight

⁹⁶ H.P. Smith and C. Purukayastha . A short history of Assam forest service, Shillong , 1946 , p. 56.

⁹⁷ Report on the Forest Utilization and Economic Research. 1935-36, Shillong , 1936, p. 1.(ASA)

charges as a crore rupees worth of timber was carried by Indian railways yearly and if the freight charge was reduced, extraction of commercial timber would increase to a large extent. It also laid importance on securing better facilities for railway timbers in small lots⁹⁸. To this, Mr Sasi Mohan Deb stated that in Assam he had succeeded in enabling the railways to reduce the freight charges for elephants caught in 'Kheddah' operations. As a result there was increase in the sale of elephants in the year 1937. Railways were also benefited as more elephants were freighted. The conference also emphasized for the utilization of those species for which there were no markets or only limited markets and to increase the durability of 'Sal'.⁹⁹ In the context of Assam, the discussion was of great importance as most of the forests of the region were mixed in character which had both 'Sal' and evergreen species and the correct determination of the latter needed thorough research.

During the Second World War, the Forest Utilization Officer of Assam was solely connected with the war supply and played a major role in exploiting the resources of the region. The volume of trade he had to deal with can be best judged from the following statement showing the approximate values of materials supplied to various agencies. The figures are in lakhs of rupees.¹⁰⁰

Details of supply Timber	Year 1940-41	1941-42	Year 1942-43	1943-44	1944-45
Railways	2 ¾	6 1/3	9	15	12 ½
War & Defence	13 ¼	23	24	91 ¾	109 ½
General Trade	1 ¼	1 1/3	2	16 ¾	10 1/5
Minor Forest Produce	Bamboos	Cane	Thatching Grass		
War & Defence	29	81 ½	125 ¾
Total	17 ½	30 2/3	64	199	257 19/20

⁹⁸ Proceedings of the 2nd Forest Utilization conference, Dehradun, March 17th - 20th New Delhi, 1937, p. 24.(NL)

⁹⁹ Ibid.

¹⁰⁰ Quinquennial Report on the Forest Utilization 1941-42 to 1944-45. Shillong, 1947.(NL)

Section Three: Forest Revenue

Forest Revenue formed the most important part of the British Forest Administration in Assam. From the various exploitative and conservative measures of the Department discussed up till now, it is evident that the British authorities organized the forests as a money yielding enterprise. It was an integral part of the British government of India and consequently was under the continuous pressure of the latter regarding the accruing of maximum revenue and minimization of expenditure. The competence of the Department depended on the increase in revenue and surplus over expenditure. It was the responsibility of the Conservator of Forests to submit annual progress reports dealing with the working of the Department in their respective provinces with all aspects of its administration including the forest revenue. These reports were revised by the Chief Secretary of State of the provinces concerned and after revision they were returned to the Conservator of Forests.

According to the British authorities, financial stringency had always been an important factor behind the slow and inferior development of forestry in Assam. As we have studied, since the second decades of the 20th century, no scientific measures were undertaken to uplift the forests of the region. Mixed forests covered over 75% of the total area under the management of Assam Forest Department and if their real value was to be judged and estimated, it was necessary to spend money on research. But research was a costly affair and required sufficient staff to whom the Assam government did not have money to pay. Therefore from the very beginning of its inception in Assam, production of maximum revenue with minimum investment was the ambition of the British Forest Department in the region.

In order to analyze the financial results of the Forest Department in the first half of the 20th century, we have divided the periods into four parts. They were:

- (1) Boom period – the period after the First World War till the advent of the Great Depression.
- (2) Slump period- the period of Great depression.
- (3) The period of gradual recovery after slump.

(4) The Second World War period.

The financial result of the periods of 20th century, that is from 1911-12 to 1944-45 has been put into tables divided into two parts. The first table deals with the period from 1911-12 to 1932-33 and takes into account the accruing of revenue during the boom as well as the slump period. The second table analyses the results from 1933-34 to 1944-45 and studies the periods of gradual recovery and the Second World War. The tables are dealing with the revenue received, the expenditure incurred, and the surplus over expenditure.

Annual Financial Results 1911-1912 to 1932-1933				
Year	Revenue in Rupees	Expenditure in Rupees	Surplus in Rupees	Percentage of Surplus of the Gross Revenue
1911-12	11,17,569	8,32,158	2,85,411	23.5
1912-13	11,33,228	8,15,671	3,17,557	28.0
1913-14	10,89,878	9,16,657	1,73,221	15.9
1917-18	14,63,297	6,44,877	8,16,420	55.8
1918-19	15,11,823	7,49,951	7,63,872	50.5
1922-23	17,18,853	11,14,635	5,99,218	42.1
1923-24	19,79,709	11,48,062	8,31,647	42.1
1925-26	30,35,672	15,67,980	14,67,782	48.0
1926-27	31,33,673	16,49,619	16,89,854	53.9
1927-28	36,13,460	14,32,200	21,81,260	60.04
1928-29	37,67,873	21,32,472	16,35,401	42.4
1929-30	35,20,007	22,21,304	12,98,703	36.9
1930-31	22,62,793	21,16,657	1,46,136	6.5
1931-32	19,27,078	16,11,208	3,15,870	16.4
1932-33	16,16,405	14,10,217	2,06,188	12.8

Source: Annual Return of Statistics relating to Forest Administration in British India for the years 1920-21, 1929-30, & 1933-34 (NAI and ASA)

Financial Results for the Year 1933-34 to 1944-45				
Year	Revenue in Rupees	Expenditure in Rupees	Surplus in Rupees	Percentage of Surplus of the Gross Revenue
1933-34	14,57,198	11,97,019	2,60,179	17.85
1934-35	14,30,413	11,72,907	2,57,506	18.0
1935-36	14,84,067	11,28,342	3,55,725	23.97
1936-37	16,85,140	11,92,886	4,92,254	29.21
1937-38	17,50,720	11,72,249	5,78,471	33.04
1938-39	16,69,298	11,60,713	5,08,585	30.47
1939-40	17,45,412	11,60,958	5,84,454	33.48
1940-41	24,37,562	12,49,512	11,88,050	48.73
1941-42	32,94,610	16,81,268	16,13,342	48.96
1942-43	37,37,351	25,26,864	12,10,487	32.39
1943-44	56,29,889	34,45,657	21,84,232	38.70
1944-45	83,54,124	85,40,078	-1,85,954

Source: Annual Return of Statistics relating to Forest Administration in British India for the years 1933-34 to 1944-45.(NL)

The Colonial Forest Department earned the highest revenue from the exploitation of Assam forests during the period of the Second World War. The period after the First World War is termed as boom period in the Progress Administration reports when there were a number of scientific developments and increase in forests staff. But the amount received during the Second World War period was at its peak and was much greater than those received during the First World War. A comparison is made between the financial results of the two world wars in the following table;

Comparison of Forest Revenue Expenditure in Surplus or Deficit between the First and Second World Wars.			
<i>First World War</i>			
Year	Revenue in Rupees	Expenditure in Rupees	Surplus or Deficit in Rupees
1914-15	9,32,295	9,37,432	-537 (Deficit)
1915-16	9,92,888	7,26,454	2,66,434
1916-17	11,56,828	6,80,303	4,76,525
1917-18	13,99,147	6,46,877	7,52,270
1918-19	15,11,439	7,46,951	7,62,488
<i>Second World War</i>			
1940-41	24,37,562	12,49,512	11,88,050
1941-42	32,94,610	16,81,268	16,13,342
1942-43	37,37,351	25,26,864	12,10,487
1943-44	56,29,889	34,45,657	21,84,232
1944-45	83,54,124	85,40,078	-1,85,954

Source: Progress Report on the Forest Administration of Assam for the Year 1944-45 (NL)

In spite of the profitable financial results incurred after the Second World War, we find that the notion of financial stringency still existing in the Progress Administration Reports. The possible reason behind this was that the revenue and surplus received from the forests of Assam were not utilized for the welfare of the region. Instead they only filled the British exchequer. As the success and efficiency of the Department was dependent on its revenue and surplus over expenditure, the British government refrained from using this money for the well being of Assam forests. Therefore any measure that would incur expenditure was not undertaken and the recruitment of forest staff was restricted as much as possible. However an important fact which could justify the British perception of financial stringency was that Assam accrued the lowest forest revenue compared to other parts of India. The following table will make a comparison between the forest revenue generated during the Second World War in different parts of India along with Assam;

Year	Assam		
	Revenue	Expenditure	Surplus or Deficit
	Rs	Rs	Rs
1936-37	16,85,140	11,92,886	4,92,254
1937-38	17,50,720	11,72,249	5,78,471
1938-39	16,69,298	11,60,713	5,08,585
1939-40	17,45,412	11,60,958	5,84,454
1940-41	24,37,562	12,49,512	11,88,050
1941-42	32,94,610	16,81,268	16,13,342
1942-43	37,37,351	25,26,864	12,10,487
1943-44	56,29,889	34,45,657	21,84,232
1944-45	83,54,124	85,40,078	-1,85,954

Year	Bengal		
	Revenue	Expenditure	Surplus or Deficit
	Rs	Rs	Rs
1936-37	18,35,757	14,97,967	3,37,790
1937-38	21,51,330	15,63,769	5,90,561
1938-39	22,41,206	16,92,715	5,48,491
1939-40	23,98,085	17,40,052	6,58,033
1940-41	26,33,847	18,00,010	8,33,837
1941-42	32,17,269	20,70,354	11,46,915
1942-43	38,37,545	25,50,811	12,86,734
1943-44	54,92,726	37,25,668	17,67,058
1944-45	1,00,01,331	44,97,493	55,03,838

Year	Madras		
	Revenue	Expenditure	Surplus or Deficit
	Rs	Rs	Rs
1936-37	46,35,742	40,49,111	5,86,631
1937-38	48,57,341	40,95,373	7,61,968
1938-39	43,86,944	39,38,784	3,88,160
1939-40	42,91,928	38,56,501	4,35,327
1940-41	46,34,567	37,35,900	8,98,667
1941-42	48,91,402	36,55,578	12,35,824
1942-43	69,77,674	49,68,868	20,10,806
1943-44	1,13,94,108	79,86,901	34,07,207
1944-45	1,40,74,827	81,48,016	

Year	Punjab		
	Revenue	Expenditure	Surplus or Deficit
	Rs	Rs	Rs
1936-37	22,47,309	25,77,559	-3,30,250
1937-38	23,60,192	22,85,007	75,185
1938-39	23,02,776	26,90,185	-3,87,409
1939-40	25,39,565	25,42,746	-3,181
1940-41	35,69,919	25,96,139	9,73,780
1941-42	50,35,720	31,00,095	19,35,626
1942-43	63,88,291	38,28,861	25,59,430
1943-44	1,17,26,880	84,62,796	32,64,084
1944-45	1,08,46,860	93,89,684	14,57,176

Source Progress Report on the Forest Administration of Assam 1945-46. (NL).

Although Assam accrued the lowest revenue in India, it cannot be held responsible for slow and inferior development of the province. Progress in terms of its forestry, transport and communication, standard of living, etc could have been undertaken with the revenue received but the British authorities deliberately kept away from any sort of investment as that would incur expenditure and would impede the ensuing of surplus. For instance, sawing of timber in Assam was a complex proposition due to lack of labour and timber forests situated in difficult topography, but the Colonial Forest Department adopted no measures to introduce mechanical sawing in the region. Similarly the Department maintained a distance from undertaking any forest development plan in the hilly divisions of Assam. Till 1946-47, there existed no working plan for the Lushai hills division¹⁰¹. Measures to develop transport and communication were undertaken only in those places where timber forests had great commercial prospects.

Section Four: Colonial Forest Personnel Policies

In 1912, after the reorganization of the provinces of Bengal, Bihar and Orissa as a result of the annulment of the partition of Bengal, significant developments took place in regard to Assam and its Forest Department. Assam attained the status of separate province and remarkable changes appeared in the personnel policies of the Forest Department. The personnel in the Forest Department got divided and opted for services according to their own preferences. Most of them chose for services in Bengal, Bihar and Orissa while very few of them had preferred Assam as it was the most unattractive region for its poor economy and communication, unhealthy climate and low standard of living etc compared to other parts of India.

Despite the rich natural resources of Assam, lack of finances was the excuse that the colonial forest officials sighted as the primary reason for the hindered growth of forest development in the province. The organization of Forest Department existing in Assam was extremely weak. Due to scarcity of finances, in the areas under the direct control of the Forest Department, the subordinate staffs

¹⁰¹ Daman Singh , *The Last Frontier: Frontier and Forests in Mizoram*, T.E.R.I., 1991 , pp. 46-47.

were poorly paid and retrenchment of forest officials was a regular feature. The hilly divisions of Assam such as the Lushai hills, Naga hills, Khasi and Jaintia hills and the North east frontier tract were termed as 'Excluded Areas' and placed under the special responsibilities of the Governor of the province. The forests of the region were administered by the political officers of the district concerned with the assistance of the subordinate trained forest officers. Till the year 1912, the province had only one Conservator of forests which was increased to two in 1913 but again retrenched to a single post by the year 1925. In 1912, the government of India decided to refrain from recruiting officials from England to the Indian Forest Service for the next five years. The following statement of the officiating conservator of forests Eastern circle, Mr W.F.Perry in 1912 -13 provides a picture of the situation prevailing during that time; "During the period one Ranger retired, one Ranger died, one Forester and five guards were removed from the service, eight guards and one office peon was dismissed, one clerk...and two guards were dispensed with. The above proves that the department does not attract a class of Government servants suitable for the work, or who will serve in order to profit by the attraction of the upper grades. The general conditions of service among the subordinate and clerical establishments were under consideration and proposals for their improvement were submitted to Government after the close of the year. The controlling staff has proved wholly inadequate to deal with the work now before the Department....Apart from the routine work connected with existing charges, which increases daily with the expansion of the demand, there are important questions to be dealt with connected with the reservation of sufficient forests for the future, the provision of village forests and grazing grounds, the control of professional graziers and reservation of thatch-producing lands, while applications for concessions of pulp manufacture from reeds have been received, and enquiries have been instituted regarding the suitability and quantity of Assam timber available for railway sleepers, etc.....all these point to the work being quite beyond the capacity of the present establishment."¹⁰² Therefore the internal perception of the forest department in Assam was one of utter lack of adequate staff and facility to deal with the prevailing situation.

¹⁰² Progress Report on the Forest Administration of Assam 1912-13, Shillong, 1913, p. 30.(NAI).

The organization of the Assam Forest Department showed only meagre signs of improvement later. In 1913-14, many of the subordinate staffs were employed for revenue collection in the western circle. During the year five guards and one peon died, three guards were dismissed, services of one clerk, seventeen guards and four peons were dispensed with, one clerk, one forester, twenty guards and four peons resigned, two guards retired and one clerk was transferred to another department. Out of 299 posts of guards and peons, only 57 posts were occupied.¹⁰³ Moreover the living conditions provided to the forest officials and staff was of very poor quality. Most of them had to stay in the midst of jungles surrounded by wild beasts and incurable diseases with inadequate housing, lack of market network, and poor means of communication. In order to deal with the situation, the Forest Department tried to recruit some of the native tribes in subordinate posts. But most of them resigned from the job as they felt that it was an interference of their freedom.¹⁰⁴

Thus the Assam Forest Service till the second decades of the 20th century was not at all attractive for its officials in any of its aspects due to the above factors. The difficulty that had risen due to the paucity of gazetted forest officers was reflected in the slackening down in all parts of the administration. In 1913-14 no gazetted officer was posted in the Lushai hills division although the Superintendent insisted on it. Due to the scarcity of the forest officers, Darrang, Nowgong and Sadiya divisions were put in charge of the civil administration in the year 1918-19. In a similar strain, the Progress Report on the Forest Administration of Assam 1929-30 considered the North East Frontier Tract as in need of an efficient gazetted forest officer since the huge tract could not be administered by a single Ranger.¹⁰⁵

Conditions however began to improve with the end of the First World War. There was rise in forest revenue and consequently emphasis was laid on the increase of both gazetted and subordinate staffs in the region. The following extract from the Government Resolution of the Forest Administration Report for the year 1925-26

¹⁰³ Progress Report on the Forest Administration of Assam 1913-14, Shillong, 1914, pp. 25-26.(NAI).

¹⁰⁴ Ibid

¹⁰⁵ Ibid

dealt with the reasons for the increase of both gazetted and subordinate staff between 1925 to 1932; "The revenue from forests continued to expand...The policy is to carry exploitation to the utmost possible limit without depreciating the capital value of the forests...The Conservator refers to the necessity of deciding on some fixed scheme by which regeneration can be secured in an economic manner, and the Government in Council agrees with him that the questions must be explained thoroughly when a new working plan is drawn up for the 'Sal' forests. It will probably be necessary to employ a special officer as Silviculturist and to spend in future considerably greater sums than have in the past been provided for plantation work. The question the Government regard as of the first rate importance and they await the considered views of the Conservator on the subject."

Accordingly the post of the Silviculturist came into existence in 1926, two posts of working plan officers in 1927, one post of forest engineer in 1927 and lastly the second post of the Conservator of forests was revived in 1928. However these posts had very temporary duration in Assam. All of them were retrenched with the arrival of the world wide Depression of 1930's.¹⁰⁶

From 1935, the Forest Department in Assam began to show signs of recovery. In that year a Forest Utilization officer was appointed and a post of personal assistant was created to assist in the process of forest commercialization. In 1937 it was decided to replace the existing Indian forest service by a separate service known as 'Assam forest service class 1'. It was obligatory that the recruits for this new service should be trained from Dehradun Forest Training Institute. In 1940 the post of second Conservator of forests was revived and measures were taken to cope with the various developments taking place during the Second World War.¹⁰⁷

Conclusion

The first half of the 20th century had opened up a new chapter in the history of Colonial Forestry in Assam. The thirty three years (1912-1945) of colonial rule

¹⁰⁶ Progress Report on the Forest Administration of Assam 1929-30, Shillong, 1930.(NL)

¹⁰⁷ H.P. Smith and C.Purukayastha A short history of Assam forest service. Shillong. 1946.p. 47.

over the forests of the region was the most important period when the commercialization process of Assam forests had gained its momentum as well as attained its peak. Measures were undertaken to improve the transport and communication system with various protective and silvicultural developments. Markets for Assam timber were established and steps were taken to meet the labour crisis by establishing forest villages. In order to regularize and systematize these developments, the post of Forest Utilization Officer was created in 1935. The major impetus to these processes was firstly given by the First World War which was further accelerated by the Second World War. Although a temporary halt in the commercialization of forests in Assam was noticed during the World wide Trade Depression in 1930's due to downfall of market but that continued only for a brief period of time. The post Second World War period brought newer developments in the scene. Various commercial timber species other than 'Sal' were discovered and the mixed forests of Assam which were hitherto given little importance gained their commercial significance. New articles of forest produce such as bamboo and faunal resources achieved commercial priority while a valuable minor forest produce like rubber lost its market. During this period, Colonial Forestry in Assam had appeared in its final form with its policies of forest conservation as well as exploitation at the same time, although compared to other parts of India, the pace of colonial forestry measures in Assam were much inferior in quality and slower in pace. The factors such as poor means of communication, difficult topography and inaccessible terrain of the province, presence of incurable diseases with practically no medical facilities, poor living amenities provided to the working officials, and acute scarcity of labour acted as practical hindrances in the smooth working of the department in the province.

The most potent factor behind the commercialization of Assam forestry was the material concern of the state for revenue. The filling of the state exchequer was the major purpose of the British government behind the commercial measures in Assam. During the First World War, revenue from Assam forests had increased considerably which received a setback during the Trade Depression of 1930's but soon regained its position in a much accelerated form during the Second World War.

This acceleration was to a large extent the result of the joint earnings from various types of timbers including 'Sal'. But compared to other provinces of India, the forest revenue accrued from Assam forests was considerably low. This was often the plea of the British authorities behind the slow pace and inferior nature of forest management in the province. It however does not mean that the indigenous forest management procedures were given preference and the colonial forestry measures did not interfere with the native customs and traditions. The latter was greatly affected by the imposition of colonial forest administration in the province. With the above mentioned developments in the 20th century, the commercialization of Assam forests had gained its foothold in Assam which remained uninterrupted even after independence.

CHAPTER THREE

COLONIAL STATE AND THE NATIVES

Assam is the abode of numerous tribes occupying the various corners of the province. These tribes speak different languages and possess cultures and traditions separate from one another but had one thing in common, previous to the arrival of Christianity in the region, most of them were animists by faith. According to the census of India 1971, the north eastern part of India, formerly known as Assam consisted of approximately 53 different tribes. Till the British rule had crept over the province, these tribes lived in clusters within forests and shared close proximity with nature. They lived an independent life of their own based on jhum cultivation, hunting and grazing and were dependent on forests for all the basic necessities of their livelihood. Forests were not only the source of food, shelter, and fuel wood to them, but also the abode of tutelary spirits and deities. They formed their villages within dense forests and considered them as haven which would protect them from all odds and difficulties. For instance, the Rengma Nagas built their villages in the midst of heavy jungles and dense under wood but did not construct any road leading to that place which was a measure of security to them¹. Similarly the Kuki and Mikir tribes of Assam also preferred to erect their villages in the heart of dense jungles.² Thus the tribal life in Assam formed an integral part of forests and was economically, socially, culturally and religiously intimately related with the latter. As Verrier Elwin aptly remarked, "for centuries the environment had been the real rulers of the tribal."³

The population of Assam in the pre- British period can be broadly divided into parts - (a) those residing in the hills and (b) those dwelling in the plains. The people living in the hilly areas were chiefly tribal while the population in the valley and plains regions were basically non-tribal. Although some of the indigenous tribes also formed a vital part of the plains population. The tribal communities living in the vicinity of hilly terrains and forest tracts were highly religious and deeply believed

¹ W.W.Hunter, *Statistical Account of Assam*, Vol. 2, 1879, p. 185

² *Ibid*, p. 186.

³ Kamaladevi Chattopadhyay, *Tribalism in India*, Delhi. 1978. p 2.

in the concept of magic, tutelary spirits and sacrifices. But the tribes living in the plains with other non-tribal population were also believers of Hinduism along with some aspects of animism. Such as the Cachari tribes dwelling in the plains of Assam like Goalpara and Cachar followed the principles of Hinduism along with their animistic faith. Apart from believing in sacrifices and tutelary spirits, the Cacharies much venerated bull, ox and cow which were considered highly sacred in Hinduism⁴. After the advent of the British, these plains dwelling tribes of Assam were began to be differentiated from the hill tribes as they came into direct contact with the mainstream of India through markets and different administrative set-ups of the government.

Since time immemorial, there existed an intimate relationship between the people dwelling in the plains and those in the hills. The non-tribal valley dwellers of Assam such as the Assamese and the Bengalis had trade relations with the hill people based on barter system. As W.W.Hunter mentions in regard to Garo hills, “the people often travel immense distances with loads of 80 to 120 pounds on their back to the market villages where they barter cotton, chillies, wax, lac, rubber, timber, etc for cows, pigs, goats, fowls, salt, earth ware pots, swords, spearheads, clothes etc from Bengalis.”⁵ Edward Gait also emphasises on the trade relations that existed between the plains and the hill people. To quote him, “At the time of the annexation of the Jaintia parganas, there was considerable trade in cotton, iron ore, wax, ivory and other articles, which were brought down from the hills and exchanged for salt, tobacco, rice and goats...Little money was in circulation and nearly all transactions were by means of barter.”⁶ The non-tribal residents of the valleys and the frontier regions of Assam often followed a policy of appeasement towards the native tribes to enter the forests for trade purposes. Such as the frontier Zamindars of eastern Bengal gave annual presents to the Kuki tribes residing in the Chittagong hill tracts, Cachar, Lushai hills and North Cachar hills which was a source of inducement to bring down their forest products into the plains. This was also a kind of payment for the protection of the woodcutters who would go into the

⁴ W.W. Hunter, *Statistical Account of Assam*, Vol. 2, 1879, p. 36.

⁵ *Ibid* p, 152.

⁶ Edward Gait, *History of Assam*, 1905, pp. 307-308.

forests to cut timber. Apart from this, the woodcutters sometimes paid a certain amount to the Kukis for their safety and security⁷. This policy was later on followed by the British as a measure of protection to prevent tribal raids in the plains.

The tribes of Assam shared an emotional bonding with forests. Their deep rooted sentiments were in association with forests, and their religion, customs, traditions, and folklore revolved around forests. The latter was so attached to their life that there were several rites and rituals which were performed with the trees. During the Ahom period, the installation of the Ahom king began with the planting of a pipal tree (*ficus religiosa*)⁸. The natives had their own indigenous methods of forest management and preservation. In the Khasi and Jaintia hills, forests were preserved by the village communities for religious purposes. To quote W.W.Hunter, "A remarkable feature in the aspect of the country through out the hills is the numerous sacred groves which are superstitiously preserved since time immemorial from the destructive hands of the woodcutters. These sacred groves contain timber trees of various kinds, rare orchids, rhodendrons, and wild cinnamom."⁹ In the Lushai hills the chiefs exercised strict vigilance against wanton destruction of trees. In the Konyak areas of Nagaland, trees of a particular area were not cut for centuries.¹⁰ Among the Angamis of Nagaland, there was a custom that that if certain species of plants were felled, double the number had to be planted¹¹. Moreover the tribal hunters did not kill animals when they were pregnant¹².

This relationship between the forests and tribes of Assam however began to show signs of disruption with the advent of British administrative machinery in the region. The communally owned forests of the tribal people were declared as government property and restrictions were imposed on indigenous forest use. In 1876-77, the settlement officer of Sylhet division declared that no personal rights existed in the forests of the division and they were exclusively government

⁷ Animesh Ray, *India- the land and the people Mizoram* , 1993, p. 26.

⁸ Edward Gait , *History of Assam* , 1905, p. 235.

⁹ W.W.Hunter , *Statistical Account of Assam* , Vol 2, 1897, p. 208.

¹⁰ Article by B.K.Roy Burman titled *Forests in the Himalayas – for the people and by the people* in the book ' *Man and Forests* ' edited by Krishnamurthy Gupta and Desh Bandhu.

¹¹ Rucha S Ghate, *Forest policy and tribal development*, 1992, p. 28-29.

¹² *Ibid*

property¹³. Similar measures were adopted in the hilly areas and forests were used to serve the commercial needs of the British government. For instance, in the later part of the 19th century, the Deputy Commissioner of Garo hills provided with licenses to woodcutters to cut timber in the 'Sal' forests inhabiting the division and collected a good sum of money from them. He also undertook measures to curb 'jhum' cultivation in the area¹⁴. The various restrictive measures of the British authorities soon began to impede the trade relations that had existed between the plains and the hill people. The Inner Line Regulation of 1873 though was an economic device to protect the hill people from any interference in their way of life acted as an impenetrable barrier between the hill people and rest of the region.

The imperial hold over the forests of Assam was further tightened with the arrival of the British Forest Department in the region. The nascent department bent on commercialising the forests of Assam considered the tribes as hindrances to forest exploitation. Forests containing valuable trees were declared as reserved while the parts consisting of inferior species were made open to the people. According to the National forest policy of 1894, "Forests that yield only inferior timber, fuel wood or fodder, or are used for the purpose of grazing, should be managed mainly in the interests of the local population¹⁵" Accordingly inferior forests were opened for the people and stringent measures in regard to native forest use in reserved forests came up. By the turn of the 20th century various laws restricting jhum cultivation, hunting and grazing etc came into existence in Assam. The indigenous impact created by the colonial forest policies in the region in the 20th century can be studied under the following sections.

Section one: Jhum cultivators

'Jhum' is the native name for shifting cultivation in North east India. As we know, it is the process of cultivation where the soil is first prepared by cutting the secondary growth and burning the dry debris when the crops are planted on the ash covered soil. The soil after being cropped once or twice is abandoned in favour of

¹³ W.W. Hunter, Statistical Account of Assam, Vol 2, 1879, p. 268.

¹⁴ Ibid p, 144

¹⁵ Vasent Desai, Issues in Agriculture and Forestry . 1984. pp 301-302

freshly cleared ones. As this type of cultivation involves the use of fire, it is also known as 'fire agriculture' and the term 'jhum' used extensively for it in North east India is believed to be derived from 'jui' which is fire in Assamese.¹⁶ A number of traditional vegetables are grown in jhum cultivation such as potatoes with major crops like paddy and millet. In the pre- British period, crops those were used for barter such as cotton, chillies, ginger, rubber, and hill jute etc were cultivated in the jhum fields.

'Jhum' cultivation formed an integral part of the tribal life in many parts of the hilly areas of Assam. In the pre-British period, it was not only the mainstay of the people but was also closely connected with their socio- cultural life. Most of the tribal festivals were celebrated in accordance with the timings of the 'jhumming' operations. Their social and religious ceremonies and calculation of time were decided according to the 'jhumming' calendar. For instance, among the Padam tribes of North east frontier tract, the newly married wife was brought home for the first time when there was new harvesting in the 'jhum' fields. There were many tribes and sub-tribes in the region among whom the first hair cutting of children took place with the beginning of the first weeding operations¹⁷. Prior to the advent of the British into the region, forest lands were owned communally by the tribes and consequently no bar existed on 'jhumming' in any part of the forests. Individual ownership of land was also recognised within the framework of communal possession. For instance, among the Mishmi tribes of North east frontier tract, all lands belonged to the clan or village as a rule. However a person could claim his individual ownership only when he would clear a particular plot of jungle for 'jhum' cultivation¹⁸.

The arrival of the British in Assam in the mid 19th century brought about significant changes in the 'jhumming' operations among the native tribes. From the very beginning, the British authorities held it responsible for the destruction of

¹⁶ Verrier Elwin , A Philosophy for NEFA , 1964 , p. 62.

¹⁷ Shifting Cultivation in North East India., North East Indian Council of Social Science Research. Shillong, 1976, p. 32.

¹⁸ A.K. Agarwal , Economic problems and planning in North East India, 1987, p. 345.

forests and were in favour of adopting strict measures to curb it. They were of the opinion that indiscriminate felling of forests as a result of shifting cultivation, coupled with high rainfall, had led to heavy soil erosion and consequent siltation in the major river banks which in turn had been responsible for heavy floods in the lower reaches of the important river systems. According to them, although the vegetation grew quickly after the 'jhum' plot was abandoned, but the successive growth deteriorated greatly from large trees to shrubs, grass and bamboos, and finally culminated in the form of rocks and gravel on slopes, thus making the areas unfit for cultivation.¹⁹ The above views were further re-emphasised and re-interpreted in the 20th century when large sums of money were spent by the government on flood relief in the plain areas of Assam. On 19th July 1937, a Hill Officer's conference was held at Shillong to treat the 'jhumming' question. It held the following opinion,

"It was unanimously agreed that the increase of floods in the plains was to some extent at least, apparent than real, pressure on the land having induced cultivators to take up holdings in the low-lying areas the flooding of which formerly passed un-noticed. It was also however agreed that there has been real increase in floods, but it was felt that, 'jhumming' being admittedly a practice of immemorial antiquity, the slow natural increase of those who lived by it was not sufficient to cause any appreciable increase in the recent years in the rate of run-off of flood water. The chief reason it was felt, was the great pace at which forest and scrub land, which naturally tends to immobilize water, was opened up in the plains. It was considered unthinkable that 'jhumias' and potato growers could be deprived of their land and livelihood in order to afforest the hills, but it was felt that certain palliatives and remedies were desirable."²⁰ In the post second world war period, the forest authorities became greatly concerned about natural degradation and the major cause considered liable for it was jhumming. In 1938-39, the jhumias were held responsible for the destruction of 'Sal' forests in the Garo hills.²¹

¹⁹ Shifting Cultivation in North East India, NEICSSR, Shillong, 1976, p. 11.

²⁰ H.P. Smith and C. Purukayastha, A Short History of Assam forest service, Shillong, 1946, p. 78.

²¹ Progress Report on the Forest Administration in Assam, 1938-39, Shillong, 1939, p. 24 (ASA)

During the 20th century, the colonial authorities adopted some 'jhum' prohibitory measures in Assam and most of them were directed towards introduction of permanent agriculture among the tribes. They can be discussed as follows:

(a) In the Khasi and Jaintia hills, Lushai hills and parts of Naga hills, terrace cultivation was encouraged as a replacement to 'jhum'. Terrace cultivation was in practice among the Khasis and the people of Naga hills prior to the coming of the British and they had very well developed irrigation and manuring system. Mr. C.A Elliot, the Chief Commissioner of Assam between 1881 and 1885 laid great emphasis on the extension of terrace cultivation in Naga hills. Dr. Hutton, the Deputy Commissioner of the division, encouraged terrace agriculture in the Sema areas of Naga hills in 1915²². Apart from the Sema Nagas, the Angami Nagas also practised terrace cultivation. To quote Hutton, "The most striking difference between the Angamis and their neighbours on the north is their cultivation of wet rice. The Angamis had an elaborate system of terracing and irrigation by which he turns the steepest hill side into flooded rice fields.²³" As regards the terrace cultivation among the Khasis, Amalendu Guha remarked, "Of all the hill tribes, it was the Khasis whose agriculture has been traditionally the more diversified. Jhumming apart, they also divide up the bottom of the valleys into compartments by means of fairly high banks. Water is let into it by means of irrigation channels.²⁴" Terrace cultivation by the Khasis earned appreciation from the British authorities also. PRT Gurdon held the view that the Khasi method of manuring to be much in advance than any system of natural manuring to be seen elsewhere in the province.²⁵ According to W.W.Hunter, "Their waters however are extensively used for the purpose of irrigation and the hill people display great ingenuity in cutting channels or aqueducts for leading the water on to the fields."²⁶

(b) 'Taungya' as a substitution to 'jhum' was proposed in some parts of Assam. It was actually the Burmese name for temporary cultivation in hill lands. This

²² Robert Reid, History of the frontier areas bordering on Assam 1883-1941, 2nd edition 1983, p. 101

²³ J.H. Hutton, The Angami Nagas, 1969, p. 72.

²⁴ Amalendu Guha, Medieval and Early colonial Assam, 1991, Centre for studies in social sciences, Calcutta 29, pp. 4-5.

²⁵ Ibid

²⁶ W.W.Hunter, Statistical Account of Assam, Vol 2, 1879, p. 210.

system of cultivation was in prevalence in some parts of Burma forests which did not have any rich tree growth. The 'Taungya' cutter felled the unwanted growth in hot weather. During the rains, he sowed rice and other cereals together with few vegetables and trees species having commercial significance and the seedlings were tended by the 'Taungya' cutter as long as the field crop was on the growth. As soon as the crop was reaped, the land was taken up by the Forest Department and the tree seedlings were tended till the crop was established²⁷. This system of cultivation was started in parts of Garo hills, Mikir hills, Sylhet, and Cachar. The jhum cultivators were employed for the purpose and paid for it. In order to attract the 'jhum' cultivators to join Taungya cultivation, the Conservator of Forests Assam, in the first decades of the 20th century defined it as follows, "...this system consists in allowing the natives to jhum the land making them when they first put their crop down, payments being made according to the results shown after they had taken all the crop off the land,...probably after two to three years. The conditions are that the seedlings which will be paid for must be more numerous, say, the seedlings to six feet square and those they must be in healthy conditions."²⁸

- (c) Jhumming was strictly prohibited in reserves of the hilly divisions of Assam by government orders. It was sternly forbidden in the reserved forests of Naga hills, North east frontier tract, and North Cachar hills. The 'jhumias' of Naga hills and North Cachar hills were blamed for much negligent and reckless burning of land far beyond the areas under 'jhum' and therefore the Sub Divisional officers of these divisions were ordered to adopt special measures in this regard. On 18th July 1916, Mr. F.M.Clifford, the Sub Divisional Officer (henceforth S.D.O.) of North Cachar hills, passed an order by which no 'Dhan' or rice cultivation was allowed within the station reserve as it led to 'jhumming'. To prove the stringency of the order he mentioned that he had given punishment to one Santo Gurung, who was caught while cutting down trees. In the following year the officer further issued an order stating, "No green trees or saplings are to be cut

²⁷ Indian Forest Records, Vol 11, Part 3, 1924, Regeneration with the assistance of Taungya in Burma. p. 1. (NL).

²⁸ Working plan of the Darugiri reserve forests on the Northern Range Garo hills division Assam, 1890, to 1905 by C.P.Fisher, Shillong, 1890, p. 25. (ASA)

inside the station reserve-- with or without permit, nor are they to be in any way injured. Dead wood may be collected inside the reserved forests, only those are dead dry.”²⁹

- (d) Issuing of various jhum prohibitory orders however did not bear much fruit in the hilly areas of Assam. Jhumming continued as before which alarmed the British authorities and they thought that serious measures had to be taken. They decided that the practice had to be curbed by enforcing penalty by fine on that person who would carry on ‘jhum’ cultivation. In the Khasi and Jaintia hills, the Inspector General of Forests proposed to tax the ‘jhumias’ and remit taxation on terrace cultivators³⁰. On 29th March 1922, Mr J.H.Grace, the Sub Divisional Officer of North Cachar hills passed a strict order which stated, “any villager jhumming within 20 yards of either bank of streams will be fined Rs50, any Mouzadar failing to report such jhumming to S.D.O. will be fined Rs 25, any Gaonbura (village head) failing to report will be fined Rs 10. This was in addition to the village fine”³¹.
- (e) Wet paddy cultivation was encouraged in almost all the hilly divisions of Assam namely in Naga hills, North Cachar hills, Lushai hills and parts of Garo hills. In the areas where the villagers were not ready to accept the cultivation, the British officials utilised their ignorance and superstitious beliefs. For instance, the inhabitants of Tungje village in North Cachar hills declined to accept wet paddy cultivation as a substitution to jhum as deaths began to occur in their village from the year they had started the cultivation. As a result the villagers developed a notion that wet paddy cultivation leads to ill health and worse. In order to allay the fear of the villagers, Mr Perry, the Sub Divisional Officer of North Cachar hills convinced them that he had the secret of a powerful and infallible puja which if performed could save the people from deaths even if wet paddy cultivation was carried on³².

²⁹ Hundred Years of Haflong Centenary Commemorative Souvenir, 1895-1995, New Delhi, 1995. pp 34-35.

³⁰ H.P.Smith and C.Purukayastha , A Short History of Assam forest service, Shillong, 1946, p. 74.

³¹ Hundred Years of Haflong , Centenary Commemorative Souvenir, 1895-1995, New Delhi, 1995, p. 35.

³² Ibid

- (f) In the Lushai hills, the political administration tried to influence the tribes through conversation with the chiefs about the disadvantages of 'jhum' cultivation. They were made aware about the material importance of trees as a source of wealth. They were also made to understand that 'jhum' would always feed their family but would never make them rich.³³
- (g) The Hill Officer's Conference of 1937 held at Shillong asked the Forest Department to plant quick growing trees in the jhum abandoned areas. According to them, this would be the best way to cope with soil erosion caused by 'jhum' cultivation.
- (h) Steps were taken to reserve catchment areas and steep slopes so that fire protection or forced early burning could be introduced to conserve moisture and enable conservation of forests from jhum cultivation.³⁴
- (i) In the district of Naga hills, the native lands bordering Sibsagar division were placed under the disposal of the government with the approval of the Chief Commissioner of Assam on the payment of Rs 1,500 to Naga chiefs although much against their wishes. In order to avoid any revolt from the tribes, the British government granted a particular area to the Nagas known as Zusa where they could carry on jhum cultivation while in other parts it was strictly prohibited³⁵.

The impact generated by the various Jhum prohibitory regulations in the hilly areas of Assam was of mixed nature. They can be discussed as follows:

- (a) In Garo hills division, the Garos rose in agitation against the British policies on Jhum cultivation. By the turn of the 20th century (1899- 1916) they protested against the reservation of forests in their district. To oppose the conversion of their jungles and jhum lands into reserved forests, about one lakh Garos from Garo hills and adjoining Goalpara district united under one Sonaram Sangma and demanded that the government should stop its policy of forest reservation in their territory. Through a series of petitions the Garos challenged the manner in

³³ Daman Singh, *The Last Frontier : People and Forests in Mizoram*, Tata Energy Research Institute, New Delhi , 1996, p. 47.

³⁴ M.C.Jacob, *The Forest Resources of Assam* , Shillong, 1946, p. 23.

³⁵ Robert Reid, *History of the frontier areas bordering on Assam 1883-1941*, 2nd edition 1983,p.165.

which the colonial administration took away their traditional rights over forests and demanded compensation for it. In order to deal with the situation, the government appointed Mr Arbuthnot, the Commissioner of Surma valley and the hilly districts to look into the problem. The investigations by the Commissioner upheld the Garo charge.³⁶

- (b) In some parts of the above division, jhumming continued as before in unclassed state forests containing valuable 'Sal' strands. Here the people burnt the 'Sal' trees as a protest against conversion of 'Sal' jungles into reserved forests. The jhummiyas took the forest officers into confidence and practised jhum cultivation in the forest areas. Thus a vast gap between theory and practice was in existence. It is an instance of the weak hold which the department exercised over the forests inhabiting the hilly regions of Assam. Some years prior to 1939-40, the Deputy Commissioner of Garo hills made a tour of the district and wrote a letter to the Divisional forest officer of the Garo hills division stating the following: "I find everywhere that the forest subordinates are abusing my orders regarding the preservation of 'Sal'. I have no intension of creating new "Sal' reserves for the forest department, particularly in the interior where there are already ample reserves which do not commercially or economically justify their existence, I have found in the course of this tour there is regular spy system going on... I have no intension of preserving all small pullies, the size of my wrist. I only intend to preserve decent sized 'Sal' trees in the course of jhumming."³⁷
- (c) In some of the hilly divisions of Assam, the jhummiyas after being ousted from their occupation took to trade in major and minor forest produce. In 1939-40, one Khamti in North East frontier tract purchased a 'Simul' mahal and was reported to have done good business. Certain Miris also worked out soft wood on permit for match supply.³⁸ In the Garo hills, the Divisional forest officer reported that the jhummiyas removed 'Sal' from unclassed state forests for their own use on which the Forest Department had little control and there was good illicit trade of timber in the markets of the neighbouring plains of

³⁶ A.C.Sinha, *Beyond the Trees, Tigers and Tribes*, 1993, New Delhi, pp. 112-119.

³⁷ Progress Report on the Forest Administration of Assam, 1939-40., Shillong, 1940, p. 3(ASA)

³⁸ Ibid p. 28.

Mymensingh³⁹. With increase in the value of bamboos as an article of minor forest produce, the jhumias of Lushai hills began to cultivate bamboos for sale instead of burning them.⁴⁰

- (d) In the North East frontier tract, the initial phase of the introduction of wet paddy cultivation delighted the natives as they raised bigger crops. But soon it turned into disappointment as wild elephants which never damaged the 'jhum's' threatened the level fields⁴¹.
- (e) The beginning of 'Taungya' cultivation as a substitution to 'jhum' though was successful in parts of Garo hills and Mikir hills division of Assam, was largely responsible for the destruction of crops like rubber, cashew nut, coffee, cardamom and black pepper etc in favour of commercial tree species.⁴²
- (f) By the 4th decades of the 20th century, a consciousness began to emerge among the tribes of Lushai hills regarding their ownership over the forests inhabiting their district. The chiefs demanded their control over the forest produce of Lushai hills and passed a resolution where they assured that if allowed to use timber on river banks, there would not be jhumming in the hill slopes. As a measure of protest against the timber traders of Cachar who utilised the riverine forests of Lushai hills for their commercial purposes, the people burnt the forests of the area. On October 1941, Mr. A .G. Mc Call, the Superintendent of Lushai hills wrote a letter to the Governor of Assam where he attached a copy of the resolution passed by the chiefs of Lushai hills. The Resolution stated, "If forest produce under Chief's control was something from which the chiefs could benefit, an incentive might be created to reduce jhumming and burning to the minimum. This development might in turn lead to a more realistic approach in the case of any changes from jhumming to fixed cultivation which might prove possible in the stormy future which lies ahead. It would make the chiefs forest produce conscious.⁴³" The Superintendent of Lushai hills emphasized on the point that the lack of ownership by the chiefs over the trees and forest produce

³⁹ Ibid p.7.

⁴⁰ Shifting Cultivation in North East India , NEICSSR , 1976, Shillong ,p. 80.

⁴¹ Verrier Elwin, A Philosophy for NEFA , 1964, Shillong, P. 83.

⁴² Ibid

⁴³ Note on the proceedings of Lushai Chiefs and their Conference. Col-1/10 /41-42. Agriculture section, File no 34. 1941-42. (ASA)

of the areas under their control was the real flaw in any plans aimed at enlisting their help to counter soil erosion, control scouring, jhumming and change over to terrace cultivation. The same officer further requested the Governor of Assam to think over the matter seriously although the response could not be inferred.⁴⁴ The emphasis on the authority of chiefs over the natural resources of their own villages was one of the main principles of the administrative policies of Major Shakespear, the first superintendent of Lushai hills⁴⁵.

- (g) In some of the hilly divisions, settled agriculture successfully replaced 'jhum' cultivation. In Naga hills, the Angami Nagas and the Sema Nagas practiced terrace cultivation⁴⁶. In the Lushai hills, wet paddy cultivation gained momentum by the second decades of the 20th century.⁴⁷

Section Two: Graziers

In the pre- British period, grazing was the occupation of a small number of tribes of Assam. As most of them were 'jhum' cultivators and depended on animal flesh for food, very few tribes of Assam were pastoralists by occupation. After the advent of the Nepali graziers as labourers in forest villages and colonial measures to introduce settled agriculture among the indigenous tribes, grazing as a means of livelihood began to gain momentum among the natives of Assam. Apart from the Nepalese and the tribes, the settled agriculturalists in the Brahmaputra and Surma valleys were expert graziers. The graziers grazed their cattle in unclassed state forests and parts of reserved forests as Assam had few pasture lands. The forest villagers and settlement holders had free grazing rights in reserved forests. Grazing in unclassed state forests were under the responsibility of civil authorities.

With the beginning of the 20th century, a number of detrimental impacts created by grazing on forests were discovered and consequently grazing appeared as the greatest impediment to forests for the colonial foresters in Assam. The negative

⁴⁴ Ibid

⁴⁵ Robert Reid, *History of the frontier areas bordering on Assam 1883-1941*, Second edition 1983, New Delhi 55, p. 43.

⁴⁶ J.H Hutton, *The Angamis*, Oxford University Press, 1969.

⁴⁷ Daman Singh, *The Last Frontier: People and Forests of Mizoram*, 1993, Delhi, 1996, p. 52.

impact created by grazing on forests has been discussed in the second chapter. By the first decades of the 20th century, the coming of large scale Nepalese graziers to Bhutan border and Assam was considered as threat by the Forest Department working in the region. The Progress Report on the Forest Administration of Assam 1910-11 stated, "Poaching by Nepali settlers is very rife on the Bhutan border, excess cattle are grazed by the Nepali settlers in the British territory."⁴⁸

The Nepalese often used to put fire in the grazing areas in order to ensure a new crop of young grass for their cattle which was regarded as immensely harmful for the regeneration of forest cover by the British authorities. According to the British land policies in the hilly areas of Assam, "The nearest approaches to dairy farmers in Assam are the Nepali graziers whose methods approach that of jhumming in the matter of damage. Formerly the hills contained evergreen forests which would not burn generally. These have now gone and have been replaced by a sea of grass, bamboos, weeds and shrubs and the jhummiias fire and graziers fire spread all over the country leaving the soil friable and exposed to heavy rain, storms of late March, April and May. The loss of soil in these months can be seen from the heavily coloured muddy streams and rivers at that time of the year."⁴⁹

By the 2nd decades of the 20th century, the number of graziers increased manifold in Assam. In order to deal with the situation, the British government increased the grazing fees imposed on cattle and grazing taxes became a source of income to them. The Forest Department earned from grazing in reserved forests while the civil authorities from the graziers in unclassified state forests. But the income of the civil authorities was much greater than the Forest Department as the latter had to provide concessions to forest villagers and settled agriculturalists in reserved forests. The amount determined by the Forest Department as grazing fee often exceeded the paying capacity of the graziers and the rules fixed by them for the realisation of grazing revenue were harsh to the graziers. In case of failure to pay the amount, coercive measures were adopted to deal with the situation. In the

⁴⁸ Progress Report on the Forest Administration of East Bengal and Assam, 1910-11, Shillong, 1912, p.4.(ASA)

⁴⁹ H.P.Smith and C.Purukayastha , A Short History of Assam forest service, Shillong, 1946. p. 74.

disputed areas, the rules fixed by the British authorities did not permit the graziers to move to the civil courts for relief. Besides, these rules were differently interpreted in different parts of Assam like it was more rigorous in Kamrup than in Nowgong⁵⁰.

The stringent grazing rules and ever increasing fees imposed on graziers by the British authorities created discontent among the pastoralists of Assam. In July 1926, some revisions were made in the grazing fees and it was determined that the levy would strictly confine to professional graziers and traders in cattle and milk. The government there after decided to appoint a committee to examine the working of the new grazing rules and to advice further action. These rules however did not provide any relief to the graziers and discontent prevailed among the people. By the third decades of the 20th century, united protest by the graziers against the British policies was noticed for the first time in Assam. On March 1934, grazing fees became a target of attack in the legislature. Associations of professional graziers appeared on the scene and carried on agitation against British grazing policies. On March 12th 1934 the Council's censure was recorded through a cut motion. The grazing fees were revised and the rigidity of grazing rules were relaxed⁵¹.

Section Three: Hunter-Gatherers

In the pre-British period, hunter-gatherers constituted almost the bulk of tribal population in Assam. Along with jhum cultivation, the tribes were largely dependent on hunting and gathering for food and religious purposes. The tribes were expert hunters and they were followers of animism of which sacrifices formed an integral part. According to the animistic belief, there exists some mysterious unknown power in all natural objects and phenomenon and the soul of animals are supposed to be dwelling in them whereby they communicate with man. The tribes deeply believed in this philosophy and considered sacrifice as a source of communication between man and nature. Accordingly large number of animals and birds were sacrificed for various purposes by which the unknown power residing in nature could be pleased and satisfied. Such as the Mikir tribes of Assam had the

⁵⁰ Amalendu Guha, *Planter- Raj to Swaraj*, 1977, New Delhi, pp. 196-197.

⁵¹ *Ibid.*

belief that they were always surrounded by evil spirits who were ever roving to harm them and could only be propitiated by sacrifice. On the appearance of an epidemic disease, they often resorted to sacrifice⁵². Among the Garos, there was a custom to sacrifice bulls on the death of a person especially a chief and dogs at the time of cremation.⁵³ Head hunting or human sacrifice was prevalent among the Nagas who believed that it ensured good harvest.⁵⁴ Sacrifice was considered as the solution to all misfortunes like natural calamities and epidemics as well as promoter of good harvest and saviour from evil spirits. In the words of a tribal author, "When man encounters hardship, danger, storm, flood, lightening, epidemic, famine, dangerous animals, death of family members etc, they seek some invisible power for assistance, motivation, strength and help. The belief in the presence of supernatural powers at the back of high mountains, flooded rivers, big trees, stones and epidemics inspires man to try and please these powers by means of propitiations and worship. Man try to please these Gods and Goddesses by offering sacrifices of animals, birds, food, drinks, clothes, metal, crops etc⁵⁵.

Hunting was thus not only a search for food but a religious activity for the tribes of Assam. Among the tribes of North East Frontier Tract, ceremonial hunts were held that ensured good harvest⁵⁶. The tribes had a belief that a group of spirits resides in jungles and are referred as 'jungle man'. They were considered as deities who bestowed blessings upon the hunters.⁵⁷ Hunting was thus a sacred affair. Apart from these, the animals were often hunted for skins, hides, tusks and horns as the tribes had trade relations with the neighbouring plains.

The tribes had their indigenous methods of trapping and catching animals. Pitfalls were dug and hidden by a bare covering of surface soil supported by reeds, light bamboos and turfs. This was meant only for minor animals. If animals were larger, bamboo spikes were laid down with sharpened heads stretching upward⁵⁸.

⁵² W.W.Hunter, Statistical Account of Assam, Vol 1.1879, p. 189.

⁵³ W.W.Hunter, Statistical Account of Assam, Vol 2, 1897, pp. 144 and 152.

⁵⁴ Somerset Playne, Bengal and Assam, Bihar and Orissa, London, 1921, p. 47.

⁵⁵ Joseph S Thong, Head – Hunters culture (Historic Culture of Nagas) Nagaland, 1997, pp 35-36.

⁵⁶ Verrier Elwin, A Philosophy for NEFA, Shillong, 1964, p. 69-70.

⁵⁷ Joseph S Thong, Head – Hunters culture (Historic Culture of Nagas) Nagaland, 1997, p. 38.

⁵⁸ Dr Hamlet Bareh, Meghalaya, Shillong, 1974, p. 49.

The Garos were acquainted with a deadly poison which they called 'makal' by means of which they poisoned water to catch large number of fishes.⁵⁹

By the third decades of the 19th century, when various British governmental set ups and tea industry were established in Assam, the region had wild life in abundance which often appeared dangerous to the British officials and tea planters working in the region. The latter occasionally went out for 'shikar', but due to difficult and unknown topography of the region and lack of knowledge about native hunting grounds of the province much relied on the native hunters and their indigenous methods. During this period, the hunting skills of the native hunters were noticed by the British authorities and were put into enthusiastic use for their safety and security in the region. Certain species of wild beasts were declared as vermin and cash rewards were offered for killing them. As early as 1870, the reward for killing tigers was Rs 5 while that of leopards was Rs 2.80 in Nowgong district. The amount was increased to Rs 25 for tigers and Rs 5 for leopards by the year 1873⁶⁰. In Lushai hills division, Himalayan black bear and Malay bear were declared as vermin and large numbers of Lushais were employed for killing them although the rates offered for the purpose were not satisfactory⁶¹. In some parts of Assam, measures were taken to increase the rates and the division of Goalpara was the first step in this regard.

By the later part of 19th and beginning of 20th century when the colonial hold over Assam was strongly established, the British attitude towards the hunter-gatherers began to change. During this period the British authorities developed deep concern for the wild life inhabiting the region and were of the opinion that they had to be preserved which would otherwise be exterminated by the native hunters. Some of the native tribes were skilled hunters such as the Kukis, Nagas and Lushais. To quote W.W.Hunter in regard to Naga hills, "The Kukis were very fond of chase and are expert hunters, destroying more wild beasts than any other tribe in the district."⁶²

⁵⁹ W.W.Hunter, Statistical Account of Assam, Vol 2, 1879, p.114.

⁶⁰ W.W. Hunter, Statistical Account of Assam, Vol 1, 1879, p. 109.

⁶¹ Daman Singh, The Last Frontier: People and Forests of Mizoram, Delhi, 1996, p. 40.

⁶² W.W.Hunter, Statistical Account of Assam, Vol 2, 1879, p. 186.

The increasing sympathy of the colonial authorities for the wild life of Assam received further impetus with the advent of British Forest Department in the province. The Assam forest regulation 1891 for the first time provided through legal orders the protection of animals and birds in reserved forests and partially in the unclassed state forests⁶³. Various wild life protection acts came up and the most prominent among them was the Rhinoceros protection act in Assam. The latter was usually killed for its horns.⁶⁴ By June 1938, revised shooting rules came up and poisoning, netting and trapping of animals and birds in reserved forests were prohibited.⁶⁵

The most important factor which played a significant role in the sudden change of British attitude towards the wild life of Assam was the British commercial interests in the region. The Forest Department working in the province, apart from commercialising the timber forests of Assam was eager to earn revenue from its faunal resources also. Accordingly, wild life sanctuaries were established in Assam as a measure of protection to wild life as well as source of income. In the initial period the sanctuaries were looked after by the Forest Department. By the third decades of the 20th century, these sanctuaries began to show appreciable results and it was hoped they would soon become self supporting. The Conservator of forests Mr. Milroy played the most significant role in initiating a comprehensive scheme for the management of sanctuaries, formation of new ones and preservation of wild life in the region. The sanctuaries established in Assam in the 20th century were:

- (a) Monas wild life sanctuary established in 1904 in North Kamrup
- (b) Kaziranga wild life sanctuary established in 1908 in Kamrup
- (c) Sonai Rupa wild life sanctuary established in 1934 in Darrang
- (d) Orang reserve
- (e) Laokhowa reserve
- (f) Pabha reserve

⁶³ Assam Forest Manual, Vol 1, Shillong 1923 (ASA) and Hundred Years of Indian Forestry 1861-1961, Vol 2, . Forest Research Institute. Dehradun, 1961, p. 130.

⁶⁴ Hundred Years of Indian Forestry 1861-1961, Dehradun ,p.130.

⁶⁵ Progress Report on the Forest Administration of Assam, 1938-39, Shillong, 1939, p. 2.(ASA)

The sanctuaries in Assam occupied 459 sq miles of reserved forests in Assam by the end of the Second World War.

The restrictions imposed on hunting created a disruption in the life of the natives. It destroyed for ever their freedom and independence in forests. But at the initial phase the rules imposed were not much stringent in Assam as were in other parts of India. As Verrier Elwin noted in the case of central provinces, "In the old days in the Central province, forest officers collected and burnt the bows and arrows of the Gonds and the Baigas. At the same time, officials and other outsiders were freely allowed to shoot the animals which the people considered to be theirs."⁶⁶ The colonial authorities did not adopt such measures in the case of Assam. Hunting as a whole could not be exterminated from the province and it continued on a much restricted scale. In 1938-39, poaching was noticed in the reserves and killing of animals in parts of unclassed state forests. The civil authorities prosecuted a number of persons for hunting in unclassed state forests and steps were taken to avoid such occurrences in future⁶⁷.

Section four: Forest villagers

Before we delve deep into the policies adopted by the colonial foresters in the forest villages of Assam and the impacts generated by them, it is imperative to provide an outline on the reasons behind scarcity of labour in the region. Paucity of labour had been a major obstacle in the way of British administration in Assam. The natives of the region never had interests in offering labour to any governmental works in the province as they felt that it would disgrace their identity. Mr Campbell, the Assistant Commissioner of Kamrup in 1872-73 was of the opinion, "it is most difficult to get labour for local roads and other work at Barpeta, and that somehow people have come to look on all government workmen as impressed labourers. It matters not if they are offered double the rates obtainable elsewhere, they are still declined to take service as it lowers their social position."⁶⁸ The same officer further rationalised the above fact by putting forward that the ancestors as well as the fellow

⁶⁶ Verrier Elwin, A Philosophy for NEFA. Shillong, 1964, pp 69-70.

⁶⁷ Progress Report on the Forest Administration in Assam, 1938-39, Shillong 1939, pp 28-29.(ASA)

⁶⁸ W.W.Hunter, Statistical Account of Assam, Vol 1. 1897, pp 47-48.

villagers of the natives were slaves of the former Rajas of Assam and were accustomed to be set up in gangs, of hundreds and even of thousands, to work without pay on digging tanks or building temples in Upper Assam.⁶⁹ Due to these factors, the people developed reluctance against working as labourers. While Mr. Campbell had held the previous monarchical regime responsible for scarcity of labour in Assam, Sir Edward Gait had a different logic to provide in this regard. According to him, the large scale unwillingness of the natives to work as labourers developed as a result of the tyrannous rule of the Burmese after the downfall of Ahom administration. To quote Gait, "the condition of the Brahmaputra valley at the time of the expulsion of the Burmese was most deplorable. No less than 30,000 Assamese had been taken away as slaves and a well known native authority was of the opinion that the invaders by their barbarous and inhuman conduct had destroyed more than half of the people which had already been thinned by intestine commotions and repeated civil wars. Those who survived had been so harassed by long continued wars and repeated oppression that they had almost given up cultivation and lived chiefly on jungle roots and plants."⁷⁰

As a consequence to the above factors put forward by Mr. Campbell and Sir Edward Gait, a feeling of terror developed in the minds of the natives against serving as labourers because they considered it as a form of slavery. After the advent of the British in Assam, any attempt to forcefully recruit the natives for departmental works often led to indigenous revolts against the British government. During the First World War a number of natives were employed as coolies for British war purposes. The tribes were always reluctant to work as labourers and therefore the British authorities often followed a policy of appeasement and cautiousness towards the tribes employed for the purpose. In the words of Robert Reid, "Mr. Hutton, the Deputy Commissioner of Naga hills was in charge of the organisation and arrangement of Sema collie corps and its ration, a task demanding an unusual of forethought and attention in detail."⁷¹ Most of the tribes expressed unwillingness to work for the government and rose into revolts. For instance, in 1917-19 the Kuki

⁶⁹ Ibid

⁷⁰ Edward Gait, A History of Assam, 1905, p. 290.

⁷¹ Robert Reid, History of the frontiers arrears bordering on Assam, 2nd Edition, 1983, p. 164 .

tribes of Manipur rose against the British government to resist the forceful recruitment of their people as coolies for British war efforts in Europe. The Kuki chiefs vigorously opposed this attempt on the ground that it was against their proud tradition. The British authorities, however, declared them as disloyal and adopted armed measures to suppress them. Although the instance relates to the Kukis of Manipur, the picture was same with the natives of Assam. A deep hatred prevailed among the tribes against working as labourers and they considered it as an infringement to their independence.⁷²

In accordance with the above views, when forest villages were established in Assam under the surveillance of the Colonial Forest Department in the region as a means of labour for forest works, the villagers often expressed lack of enthusiasm in their works and rebelled against the forest authorities. The latter instead of understanding the views of the people held them responsible for forest destruction in the province. By the beginning of the 20th century, forest villages in Assam became a target of attack for forest devastation in the region. The British foresters blamed the forest villagers for depletion of forest cover and soil erosion in Assam by conveniently forgetting that these villages were actually created by them for supply of man power to the nascent Forest Department in exploiting the natural resources of the region. The Nepalese and some of the native tribes constituted the population of the forest villages. Apart from their departmental duties, the Nepalese often worked for the indigenous tribes also. They assisted the tribes in carrying on terrace and wet paddy cultivation, mixed cropping and cattle rearing etc. Consequently they faced no native opposition while settling in the forests of Assam. They were mostly graziers by occupation. During the second to third decades of the 20th century, Nepali immigrants migrated to Assam in large number and settled mostly in forest villages as labourers. As their number gradually increased, the British government held them primarily responsible for forest destruction in the province. According to the Administration Report of 1931, "Nepali graziers are numerous and many have settled in reserves as forest villagers. They are ruthless destroyers of forests. Along the northern boundary, many Nepalese have settled in Bhutan. These graziers

⁷² Jyotirmoy Roy, *History of Manipur*, 2nd Edition, 1973, pp. 138-139.

habitually graze their herd of buffaloes and cut any produce they may require in reserved forests. Nepalese should only be permitted to settle near centres where milk is required for officers and subordinates.”⁷³ Despite the various allegations, the British authorities did not adopt any strict measures against the Nepalese because they were the only people who had no negative notions against performing as labourers or coolies for the British government. During the Abor expedition of 1912, most of the coolies were Nepalese.

As has been discussed in our previous chapter, certain liberties were granted to the forest villagers in regard to forest use such as free grazing rights and use of forest products in the reserved forests. In unclassed state forest also, these people had rights to extract timber, dead wood, fuel wood and miscellaneous forest produce without payment of any royalty. In return, they had to perform labour for the Forest Department which included sawing, measures for fire protection, cutting of creepers and demarcation of boundaries etc. But these duties assigned to the villagers never appeared very attractive to them. As minor amount was paid to them for their works which was quite irregular, the forest villagers often expressed reluctance to work for the department. The Conservator of forests in 1902-03 noted, “It is very possible that more cash may have to be paid in future for clearing and demarcation of boundary. The labourers are not taking free produce in many cases from the reserves though the permits were issued and they may in time obtain their produce from unclassed state forests on ordinary home consumption permits and demand payment for their labour.”⁷⁴ The conditions prescribed by the Forest Department regarding the use of forest products were often unacceptable to the forest villagers. They were unwilling to work for what been their rights and accept them as rewards. In some of the divisions of Assam, the forest villagers refused to agree with the terms and conditions of the Forest Department. In 1906-07, when certain divisions of East Bengal were parts of Assam, troubles between forest staff and forest villagers were

⁷³ Administrative Report of the Conservator of Forests, Western Circle ,1931, Assam Forest department, Shillong, 1931, p. 12 (ASA)

⁷⁴ Progress Report on the Forest Administration of Assam 1902-03, Shillong, 1903, pp 1 and 2 (NAI).

reported from Cachar, Darrang and Jalpaiguri divisions owing to their refusal to render stipulated labour to the department when called upon to do so.⁷⁵

By the third decades of the 20th century, the conflict between forest villagers and Forest Department became more pronounced. The disinclination of the villagers to work for the department was reflective in their own actions. For instance, in the Kochugaon forests of Goalpara division, the villagers were much interested in cultivation of paddy rather than working for the department as the forests were surrounded by large paddy fields. In such situations, "the more jungli and inarticulate the cultivator, the more conscientious he is in carrying his part of bargain."⁷⁶ During the Non-Cooperation movement of 1921-22, considerable conflicts between the forest villagers and department were reported in opposition to unpaid labour demanded by the latter. In 1921 the ryots of Kochugaon in Goalpara division stopped performing unpaid labour or 'begar' for the Forest Department under the leadership of one Pratap Chandra Brahma, a Boro Cachari peasant. The British government served the villagers of the area with eviction notices and Assam Rifles was called to push them out.⁷⁷ Similar was the case in Boko range in Kamrup division. The state of affairs remained unchanged till the advent of the outbreak of the Great Depression of 1930's. The forest villagers had little inclination to work for the department in spite of the various concessions granted to them. The Conservator of forests in 1931 reported, " Those villagers who have settled in reserved forests as forest villagers get much forest produce then they require up to certain limits in return of 10 days labour yearly without payment. With exception of dragging timber by buffaloes, the surrounding population had little or no interests in working."⁷⁸

With the outbreak of the Second World War, the exploitation of forest resources increased manifold in Assam. For this reason, whole hearted cooperation

⁷⁵ Progress Report on the Forest Administration of Assam 1906-07, Shillong, 1907, pp 17 and 18 (NAI)

⁷⁶ Quinquennial Report on the Forest Administration of Assam, 1919-20- 1923-24, Shillong, 1924, pp 10 and 11.(ASA)

⁷⁷ Ibid and Amalendu Guha, Planter- Raj to Swaraj, 1977, p. 143.

⁷⁸ Administrative Report of the Conservator of Forests, Western Circle, 1931 Assam Forest Department, Shillong, 1931, p. 12. (ASA)

by the forest villagers was considered indispensable by the Forest Department in the province. But scarcity of labour continued to handicap the smooth working of the department. During this period a number of measures were adopted by the British forest authorities in Assam to meet the labour crisis. The numbers of working days for forest villagers in return to free forest use were reduced from 10 to 5 as a measure of concession. But the forest villagers demanded further concessions and started agitating against the British authorities. As a result, the government stopped 5 working days in some districts in favour of none. The British government under the proposals of the Conservator of forests gave serious thoughts to replace what was popularly stigmatised as 'forced labour' by the forest villagers. Consequently cash payments in lieu forest works were decided to be increased. In order to deal with the problem of voluntary labour, the government decided to import labour from outside⁷⁹. During this period the Forest Department adopted measures for the amendment of its laws as according to it forest produces were getting depleted at a tremendous rate after being used by the forests villagers. Consequently hammer marks, permits and certificates containing an accurate description of forests were enforced to safeguard private and state ownership of forest lands such as Zamindaries, Tea estates, annual and periodic patta land, land leased on payment of reduced timber valuation, roadside lands, Unclassed state and Reserved forests as a means of identification.⁸⁰ According to the Indian Forest Act 1927, establishment of forest villages in reserved forests were abolished.

Section Five: Settled Agriculturists

Settled agriculturists constituted a very minor part of the native population of Assam during the British period especially in the 19th century. As most of the people were dependent on jhum cultivation and hunting for their livelihood, very few of them were agriculturalists by occupation. The settled agriculturists in Assam consisted basically of the non-tribal population residing in the Brahmaputra and Surma valleys. Due to this reason, a slow growth in the cultivation of traditional crops was noticed in Assam in the 19th century when the population of the province

⁷⁹ Progress Report on the Forest Administration of Assam 1939-40, Shillong, 1940, p. 27.(ASA)

⁸⁰ Ibid, p.27.

was gradually increasing due to the establishment of tea industry and various other departments of the colonial government. By the sixth to seventh decades of the 19th century, tea industry in Assam had reached considerable heights and the slow expansion of the traditional agriculture in comparison to it was particularly noticeable.

In order to deal with the issue, the doors of Assam were opened for large scale immigration with the beginning of the 20th century. Cultivators and farm labourers were especially encouraged to settle in Assam and most of them were from the neighbouring areas of East Bengal. Between 1911 to 1931, as many as 4,96,000 farmers and agricultural labourers migrated from East Bengal to Assam⁸¹. A majority of them came from the single district of Mymensingh⁸². The policy of settling classes of farmers from outside to enhance the growth of traditional agriculture was first recommended by the Chief Commissioner of Assam in 1899 which was materialised in the 20th century. In order to protect the interests of the people in the tribal areas, the government introduced a system known as Line System. According to it, an imaginary line was drawn on the land demarcating two distinct areas and no immigrant peasant was allowed to occupy or settle at any land beyond this line. This system was first introduced in the district of Nowgong in 1920. By 1930 it was in operation in most parts of upper Assam⁸³.

With the settlement of the East Bengal peasants in Assam, traditional agriculture and cultivation of commercial crops such as jute, tobacco and cotton etc made remarkable progress. From 1901-02 to 1938-39, the area under settled agriculture in Assam increased by 54%⁸⁴. It is also interesting to note that the expansion of general agriculture during this period was higher than that of tea. While areas under general agriculture increased by 56%, those under tea increased by 30% only⁸⁵.

⁸¹ Census of India, 1931, p. 65.

⁸¹ Ibid, p.27.

⁸² Ibid

⁸³ Muhammad Abu B Siddique, Evolution of land grants and labour policy of the government, 1990, p. 65.

⁸⁴ Ibid

⁸⁵ Ibid

Till the third decades of the 20th century, the immigration of cultivators and farm labourers as encouraged by the government did not produce any confrontation with the Forest Department working in Assam. Since the number of the immigrant peasants were comparatively smaller, their farming processes and cultivation of fields did not directly affect the colonial policies of forest conservation. But by the end of the fourth decades of the 20th century, a silent and suppressed clash of interests was noticed between the Revenue and the Forest Department in Assam when there was increase of lands under cultivation. The growing land hunger among the immigrant peasants led the Revenue Department initiate a regular planned system for converting wastelands into agricultural fields which also included considerable areas of reserved and unclassed state forests. In this process, the immigrant peasants came into conflict with the Forest Department which emphasised on the reservation of forests and was not prepared to give up parts of reserved forests for cultivation. According to the Progress Report on the Forest administration of Assam 1939-40, "Since there is a constant urge for the allotment of 'waste land' and even for a disforestation of sufficiently cultivable areas in reserves, it is necessary to stress the warning that despite its traditional forest wealth the province has a low proportion of reserve(9.9% to be compared with 27.5% in so highly industrialised a country as Germany)and may, if sacrifice of 'unclassed' forests is given free rein, find itself in the no long period of time actually short ordinary domestic requirements."⁸⁶

The conflict between the immigrant peasants and the Forest Department was more pronounced in those lands which were situated on the banks of rivers. These lands were most attractive to both the peasants as well as the Forest Department. While the former considered them suitable for cultivation, the latter held them appropriate for trading purposes basically of timber. The Senior Conservator of forests in 1939-40 noted, "...in respect of lands bordering on the rivers, which are at once the most attractive to the cultivator and those which for the protection of the

⁸⁶ Progress Report on the Forest Administration of Assam, 1939-40, Shillong ,1940, p.27.(ASA)

river channels, the prevention of erosion and the ready removal of timber by water, should above all be retained under forest growth.⁸⁷

The increasing land hunger among the immigrant peasants led some of them to take up most unsuitable land for ordinary cultivation with no proper water supply and means of communication. In this context the Forest Department working in Assam held the opinion that such occurrences would lead to large scale destruction of forest produce and would result in scrub growth⁸⁸. The Deputy Conservator of Assam in 1940, Mr. M.C.Jacob expressed deep concern over the issue and remarked, "Existing unclassed state forests are being jhummed extensively, have been and are being rapidly taken up for cultivation by immigrants from Bengal as well as the indigenous people and are deteriorating rapidly under uncontrolled exploitation of forest produce given free to settlement holders and by grazing. It is therefore only a question of time before this type of forest is wiped out."⁸⁹

Conclusion

The commercial and imperial policies of the Colonial Forest Department in Assam intervened into the day to day life of the natives. The concept of property rights over forests by the natives was challenged and the undefined traditional rights of the people formerly in existence over forests were questioned. Steps were undertaken to prohibit jhum cultivation which was the mainstay of most of the people. Instead emphasis was given to popularise terrace and wet paddy cultivation among the natives. In some areas 'Taungya' system of cultivation had successfully replaced 'jhum'. According to the Progress Report on the Forest administration of Assam 1939-40, an area of 1,023 acres previously burnt under jhum cultivation were regenerated by 'Taungya'⁹⁰. This was considered as a great success by the colonial Forest Department in Assam. But it cannot be said that the department was totally successful in exterminating jhum cultivation from the region. In parts like Garo hills,

⁸⁷ Progress Report on the Forest Administration of Assam, 1939-40. Shillong, 1940, p. 27.(ASA)

⁸⁸ Ibid, p.27.

⁸⁹ M.C.Jacob, The Forest Resources of Assam, 1940, Shillong, p.1.

⁹⁰ Resolution on the Report of the Forest Administration of Assam in the province of Assam for the year 1939-40, Shillong, 1940.

the people strongly resisted against British policies and the system of cultivation continued although in a much restricted form.

Apart from the jhum cultivators, the imperial forest policies also intruded into the life of the graziers, hunter-gatherers, forest villagers and settled agriculturists. By the beginning of the 20th century, ban was imposed on hunting projecting it as a crime. Till the 19th century, vermin eradication was a part of British forest programmes in Assam. But by the turn of the 20th century, it was termed as an offence punishable by law as wild life sanctuaries began to come up in Assam as an important source of revenue. Thus the British authorities infringed into the freedom of the natives over forests according to their own interests. As a result of all these measures, the colonial policies produced popular unrests among the natives. In the year 1934, united protests among the graziers of Assam were noticed for the first time in the region. The indigenous people resisted to the imperialistic measures imposed on them by the British authorities. This was remarkably visible among the forest villagers whose reluctance to work for the Forest Department had attained such level that it impeded the smooth working of the department in Assam. As a result, the colonial authorities were bound to adopt lenient measures in favour of the forest villagers.

Lastly one of the important impacts created by the colonial forest policies on the native tribes of Assam was that it introduced the concept of commercialisation of forests among the indigenous population of the region. The tribes formerly dependent on forests for subsistence began to take up trades on forest products. The colonial forest policies had intervened into the indigenous life of the people to such an extent that they had no alternative but had to adjust themselves with the process of commercialization for survival.

CONCLUSION

Colonial forestry in Assam by the end of the Second World War had come a long way from its enfeebled initiation in the later part of the 19th century. Our study into the major areas of colonial forestry, viz. the establishment and evolution of the colonial Forest Department and its policies to conserve and to commercialize the forest resources of Assam, led to the creation of a knowledge base about the natural resources of the province, especially the various types of forests existing in the region. Alongside this, surveys and reports on the possibility of growing commercially valuable varieties of major and minor forest produce from the late 19th century yielded mixed results for the project of colonial forestry. While on the one hand, it is the account of the success of an infant department rising from scratch and the various methods to regulate and classify forests according to types and commercial significance; on the other hand, it is also the description of the increasing subjugation of the rights of the native people dependent for their livelihood on the forests. This marginalization of their traditional use led to a transformation of the way in which tribal life was linked to the forests. Such alteration exhibited itself in the nature of joint protests.

I have tried to show that there exists ambivalence in the approaches of the colonial Forest Department in the case of Assam with regard to issues of conservation and commercialization. The Forest Department framed the legitimacy of its arrival in Assam in a rhetoric of conservation: to protect the forests from the ravages of the indigenous natives and also the other departments previously in control over the forests in Assam. Simultaneously, however, consequent to the introduction of the Forest Act of 1878 it classified forests into Reserved and Unclassed State Forests for the state's personal use and for indigenous use, respectively. The apparent commercial agenda of the Forest Department was exposed in the fact that the former type consisted exclusively of marketable timber species like 'Sal', while the latter category consisted of inferior varieties of timber. In this early phase there were also other interests that the Forest Department had to

serve, for instance, in the case of the Lushai hills tract a reserve forest was established in the late 19th century to serve the political interests of acting as a safeguard to the Cachar plains from the raids of the Lushais. Thus we find the Forest Department catering to a number of agendas. This balance between commercial and conservationist approaches in the early phase of forestry gave way to a predominantly market-oriented programme from the second decades of the 20th century in the wake of the First World War that augmented manifold times by the Second World War, despite the slump of the 1930's. The new value that was found in the evergreen species of wood other than 'Sal' was the chief reason for this rise. But this increased exploitation of Assam forests by the colonial state itself in the 1940's led to a renewal of concern for conservation. As the comment from the Governor of Assam justifies, "The European War, while it has provided a valuable market for timber and other produce for military purposes, has also brought realization of the case with which the satisfaction of the emergent demands may deplete the wealth of the province in a particular class of produce: an example is the probable growth in the demand for soft woods for tea boxes."¹ Thus, the Forest Department had come a full circle from an indictment of indigenous natives to a position of self critique. Although this did not hamper their commercial ventures in practice, the realization of the concern is itself indicative of the heterogeneity of attitudes that existed among the British officials.

The imperial regime of colonial forestry in Assam led to modifications in the relationship between the ruler and the ruled. My study helps us understand and analyze the continuities and breaks between pre colonial and colonial attitudes towards forests and forest people. The colonial forest policies in Assam introduced the concept of visualizing forests as resources and trees as commercial commodities. In pre British Assam, forest was never viewed as commercial resource and consequently was not a revenue generating device of the government. The Ahom kings were the owners of all lands in the plain areas of Assam and allotted the bulk

¹ Resolution on the Report of the Forest Administration in the province of Assam for the year 1939-40, Shillong, 1940. (ASA)

of these lands to the 'paiks²' or 'raiylats' in lieu of their services to the state. The 'paiks' were also given lands for homesteads by the king for which he had to pay a poll tax of Rs.1 per annum³. In the hilly areas of the province which were under the independent tribal chiefs, land was a communal property although individual ownership was also recognized within it. According to Verrier Elwin, "Each family acquires rights over the plots which it has cleared, the title which possess to their male descendents, and in course of time, each has a number of such plots in different places within the general village area. Individual ownership of land is thus established within a framework of communal possession."⁴

With the advent of the colonial administration in Assam, collection of maximum revenue was high on the agenda of the colonial state. The natural resources available in the colonized country were to be utilized to subserve British commercial interests. The basic changes that had appeared in the relationship can be summarized as the following: Firstly, during the colonial period, the undefined traditional rights of the people were questioned and challenged by the colonial foresters. The indigenous forest users were maligned as desiccators of forests who, according to the British forest officials should be brought under stringent government control. The policies of forest conservation promulgated by the German foresters were considered of prime importance by the colonial authorities and large tracts of forests were declared as government property. The portraying of forest dwellers as destroyers of forests was a phenomenon peculiar to the colonial period. Secondly, the intervening nature of the colonial Forest Department in Assam in the first half of the 20th century produced a feeling a discontent among the forest users of the region. During this period, united protests against the ruling authorities were noticed among the indigenous forest users of Assam regarding their use of forest

²During the Ahom period, the adult male population of Assam was divided into some sections known as 'khels' charged with the duty of rendering services to the state. The Services included arrow making, boat building, boat plying, house building, road construction, catching and training of elephants, revenue collecting, and fighting as soldiers etc. Except the nobles, priests, and persons of high caste along with their slaves, the entire male population between the ages of 15 to 50 was liable to render service to the state. They were known as Paiks.

³ Dr Nirmal kr Basu, Assam in the Ahom age, 1970, p.152.

⁴ Techno Economic Survey of NEFA, New Delhi, 1967, p.27.

lands. In 1934, the professional graziers of Assam rose into united revolt for the first time against the colonial grazing policies and were successful in relaxing the rigidity of the grazing rules fixed by the British government. Similarly, the forest villagers of Assam unitedly protested against the colonial authorities as a result of which the latter was compelled to reduce the stringency of their policies in forest villages. Other implicit forms of protests may be located in the burning down of 'Sal' trees in the unclassed state forests of Garo hills by the native tribes to forestall any attempt for reservation by the colonial state. These integrated resistances to colonial measures played a significant role in generating consciousness among the indigenous people regarding their rights over forests. The colonial forest policies were never effective enough to uproot indigenous methods of forest use especially jhum in its entirety. Thirdly, some of the native tribes adapted themselves to the process of commercialization unleashed by the colonial state. The population dependent on jhum cultivation and hunting and gathering for subsistence began to decline with a commensurate increase in the number of people engaged in the use of resources for commercial purposes. As has been discussed in the third chapter, the jhumias after being driven out of their cultivation took to trade in major and minor forest produce in North East Frontier Tract and Garo hills. But the impact varied from tribe to tribe and region to region.

In spite of such transformation in the social and ecological structure of Assam produced by the colonial forest laws, the authority of the Colonial Forest Department in the region remained limited in certain aspects. The sphere of jurisdiction of the Department in Assam was excluded in the following divisions: Firstly, the unclassed state forests were under the civil authorities and the Forest Department had no direct control over them. The latter could exercise direct authority only over the reserved forests. Secondly, the forests in the Excluded Areas of Assam such as Garo hills, Khasi and Jaintia hills, and Lushai hills among other such areas were under the special responsibilities of the Governor of the province. The forests of these areas were directly administered by the political officers of the division concerned with the assistance of subordinate trained forest officers. Therefore the Forest Department could not exercise direct control over these areas

but had to function through the political officers and their subordinate staffs. Thirdly, in some of the Zamindari areas of Goalpara, the Colonial Forest Department could not claim the produce. Their authority was limited to Karaibari parganas, Bijni estate and Mechpara where the British foresters could exercise their direct power.

Apart from the above, the smooth working of the colonial Forest Department in Assam was also handicapped by some other factors. The composition of forest staff in Assam was weak compared to other parts of India. During the period under review, Assam was the most backward province of India with difficult topography and unhealthy climate. There were virtually no proper roads connecting the mainstream of India with the north eastern part of our country. Due to these reasons, most of the forest officers were reluctant to work in Assam. Besides, lack of funds was a problem always posed by the forest officials as the biggest obstacle in the working of the department, though we find from our study on forest revenue that generally there was surplus over expenditure. Till the third decades of the 20th century, there were no silvicultural measures and working plans in regard to the forests of Assam and the appointment and retrenchment of forest staffs did not reflect the genuine needs of the province. Moreover till the second decades of the 20th century, Assam was in the process of continuous administrative changes due to which the Colonial Forest Department faced problems in establishing itself firmly over the region.

In post independent India, the continuities in policies with the colonial past has led to commercialization of forests culminating in large scale forest depletion and intrusion into the lives of the forest communities. The present environmental studies are the reflection of the growing concern over the ecological changes produced by commercialization of forests in India. This study has been an effort to historically trace the administration of Colonial Forestry in Assam in the first half of the 20th century and to locate the changes that had taken place in the ecological and social fabric of the region. Today, the forest cover of Assam is dwindling at an enormous rate. The area under forests in the state is only 22% which is far below the

national minimum of 33.3% under productive forests prescribed by the National Forest policy⁵. The process of commercialization that had begun in the colonial period attained its climax in the post independence era. The changes brought about in the life of the natives can be comprehended by the words of A.C.Sinha, “.....in the process a neo-tribal elite has emerged on the scene. He is utterly confused because of the conflicting demands made on him. He cannot and must not disown his roots and, at the same time, feels uneasy with consumer articles given by the market economy, which his system cannot produce. In the process, the newly emerged tribal elite are condemned to continue with a façade of old spirit of defiance, but goes on living on the left over of his limited resources such as forests.”⁶

⁵ D.D. Mali, *Economic problems and planning in Assam*, 1989, pp. 21-22.

⁶ A.C.Sinha, *Beyond the trees, tigers and tribes*, 1989, pp. 166-167.

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