

Chapter 7

Conclusion

This chapter forms the concluding part of the study and the generally finding of the study is discussed. The general finding included the pre-colonial forest management system, the colonial forestry and its impact on local environment are discussed. The traditional method of water management and the colonial introduction of new method of water supplying system are included. The study focused the colonial ruler's exploitation of major forest produce (timber, fuel wood, firewood, etc.) other than the minor forest produces (animal, cane and bamboo, stone and earth, grass and fodder, incense and perfume, cardamom, orchid, etc.) also concentrate on domestic water management in Manipur State.

Pre-Colonial Forestry and Environment

The study found that, Manipur prior to the colonial intervention of Manipur forest (especially in the overlooking valley), forests were not directly controlled nor scientifically managed and conserved the forests produce. However, the forests were managed under the forest department *Urungba Loishang* which consists of a various forest officers supervised by the *Urungba Achouba* (Chief Forest Officer) assisted by his three official stuffs the *Umang-loi Hanjaba*, the *Umang-loi Hidang* and the *Khoirungba*.

The forests provides fruits, roots and tubers for food, herbs for medicine, woods for making of yoke and plough for agriculturists, bamboo and creeper for making of mat and baskets, leaves for eating plates everything available in the forests. There exists a symbiotic relation between man and the forest. The ecological wisdom of the hill people were solidly based on "experience" and they depended on this knowledge to fulfill most of their day-to-day needs (their economy). The ecological wisdom of tribal says, the signs and symbols of forest were understanding, what will happens in the natural surroundings for instance the flowering of bamboo is a sign that famine is close at hand because it would attract rats that would then be detrimental to farming and cultivation. When tender leaves start growing on trees, it is indicative that fishes are multiplying in rivers and seas.

Resource and Ecology

Nature endowed the people of Manipur from the distant past with the quality of soil and climate suitable for a wide variety of crops, fruits and vegetables. The land is covered with forest and separated from one another by deep river valleys, and thus possesses all the attractions which are conferred by stately timber, luxuriant undergrowth of bamboos, creepers and giant ferns, bold cliffs and rivers rushing through wild gorges. The traditional management system of economy has essentially remained a forest based economy till today. A majority of industries in Manipur were the forest based for instance industries like carpentry, cane and bamboo work, broomstick making, firewood, etc. were obtained the raw materials from the forest, which provides employment opportunities to a large section of the rural people who work in the forests by felling trees and sawing timbers.

The study detailed on the agricultural and its important for the Manipur people (Food, Drinks and Smoking) household utility, forest medicine and its treatment, clothing & dyeing, hunting and fishing, forest, religion and musical instruments, bamboos and its management. Many people especially the rural of the hilly areas were found survived by solely depended their food items, which found in abundance from the forest. Also the people of Manipur State studded with *Tirthas* (sacred places) such as Nongmaiching, Hiyang-thang, Nungjeng and Mondum, Ingourok and Koubru. Believed that the guardian spirits were presence in these forests, further suggested the spirit take care and protects the people from sickness, pain and invasion by enemies.

Forests, Water and Environment

Besides of forest and water for food, drinks and Smoking, Household Utility, herb medicine, clothing dyeing, hunting or fishing, religion related and musical instruments etc., the most important thing is of environmental resource (forest and water the regulator of our climate). The impact of ecological imbalances directly affects the eco-system of the environment. Violence to the most essential resources (water and forest) is probably the worst form of violence because it simultaneously threatens the survival of all life. The study examines the important of forest and water resource at play, the most important

resources that helps the world for maintaining the ecological order. Forest played the most important roles which fewer are visible to the common man of ecological role, that they influence the wind, temperature, humidity, soil and water. Forests are the greatest achievement of ecological evolution, the largest most complex and most self-perpetuating of all eco-system.

Forest and water resources have a profound influence on the economy and as well the environment of Manipur. The prime necessities of their life and other useful and valuable products are derived from forests even the animals having economic and commercial significance depend upon this green gold (forest). British conquest of India in general and Manipur in particular, encourages deforestation and encouraged cutting of tree for timber instead of putting an immediate stop to further devastation. However deforestation produces soil erosion, increasing sediments load of the river, siltation of reservoirs and river bed, increase in the frequency and dimension of flood and drought, change in the pattern of precipitation, intensification of greenhouse effect, decreasing agricultural production because of loss of soil fertility, extinction of wild life etc.

The culture of depending on forest by the humankind has brought a great changes to the environment. The study found that, the most evil agent of environmental degradation is of modern technology, produced by the developed countries has resulted, in an environment more conducive to the physical and mental well-being of man by escalating level of pollution associated with deterioration of the environment polluting the air that we breathes, the water that we drinks the food that we eats.

Forest Management in Manipur during Colonial Period

Forestry in India is different to that of any other country. Every kind of climate and every type of vegetation from, the alpine forests of the Himalayas to the tropical evergreen forests of the West Coast, from the desert forests of Sind and the Punjab to the bamboo clad hills which form the eastern most frontier between India and Burma.

Pre-Colonial Forestry and Environment

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It also found that, the indigenous knowledge of hills tribal which were blended of locally rooted and exogenous knowledge crafted to suit local situations. Among the hill tribes there were some sense of controlling the damage cause to forests although no scientific management or scientific forestry that we see in western society that had not taken place. Ecological wisdom of tribal, make them know to calculate their ecological changes from the signs and symbols, from the nature that what will happen in the natural surroundings for instance.

Colonial Forestry and Environment

Prior to the British rule, the traditional mode of commercialization of forest resources were not undergo with the neighboring countries neither had they exploited the forest resources (timber for revenue) nor have the definite forest resource policy (scientific

management) during Pre-British Manipur (1891). The Charter of Indian Forest 1855 affected the Manipur forest, conserved for the commercial activities. The Maxwell declaration brought the Manipur forests as “State Forest Reserve” (the virgin forests of Manipur were made the property of the State government and placed under the charge of the Forest Department). Besides, steps were also taken to improve the forests of the State by appointing a various officials to frame the policies for better extraction of tree like (a) Maxwell’s proposal on Manipur forest (b) Mr. Robowthem’s Report and (c) Mr. A.J.W. Milroy’s Report.

The *Darbar* had the law making powers. The *Darbar* Resolutions has the power of law as such, the *Darbar* yielded all the powers of the State and the king became the titular. The King on attaining major in the year 1907 was installed as the King and he became the president of the *Darbar*. But, majority of the powers remained with the Vice president who was a European. In 1916, an Englishmen was made the president, and Maharaja remained head, but just short of being a titular head. The *Darbar* Resolutions, the serious ones like imprisonment over five years requires HH the Raja’s confirmation in general, but some of the resolutions were put in to practice even without the confirmation of the Raja. Again, most of the serious issues were referred to the Political Agent, who if he felt necessary, was referred to the Governor General. Various other resolutions concerning forests on regulation of Jhuming, extraction, hunting and game rules, fixing of royalty were passed by the *Darbar*. These resolutions were in fact, the backbone of forest management in the State and they had force of law. The powers of courts were vested with the *Darbar* Member and Forest Officers. The powers of court to dispose of forest cases by acting as a court, the judgments were made appealable to the Appellate Court and to the *Darbar*. The passing of Indian Forest Act, 1927 for adoption in the year 1941 and 1945 did not change this arrangement. The Indian Forest Act was not much up to the likings of the Maharaja and did not get his accent.

Laws Enacted to Conserve/Protect Forest Resources under the act of 1878, the Indian forests Act, the forest resources were controlled and exploited by creating a number of State Forest Reserves, which were again, leased out to the different contractors. The monopoly rights to extract timbers from each block were given to different contractors. The colonial systems of selling of forest produce including thatching grass forest produce of the State in by auction, tender allotment and permit system. The colonial authority undertake the scheme of ‘afforestation’ to some extent in some part of the State’s

Reserved Forest areas, but the operation of forest resources by the colonial State were judged against the degree of exploiting the forest (The foremost thing was to collect a percentage royalty with a small amount of investment for the conservation of forest).

The colonial intervention of Manipur forestry in the year 1891 introduced the scientific method of forest management so also introduced commercial forestry (timber for revenue). According to them, forests were unproductive; the expansion of agriculture was the sign of progress, encouraged the agricultural expansion and plantation of industrial cash crops (jute, sugar, wheat, cotton, tea etc). More forests areas were cleared and brought under agriculture to earn more revenues. The colonial forestry has had range wide ranging consequences. Apart from enriching the British and their collaborators, the impact was overwhelmingly negative. For, it caused an irreparable environmental damage which jeopardized the livelihood of communities who were subsisted for their lives solely on the forests.

Also, the colonial forest officers view on Manipur forest resource as a means of State revenue. 'The forest revenue should be to expand the exploitation and uses of timber rather than raise its costs.' The increase for revenue, however, had a detrimental effect on the forest, because there was no restriction imposed on the extraction of trees (without technical advice). For, it was at the mercy of the timber trader, whose interest was to take as many as possible. The avenue to expand the State revenue timber is followed by grass resource, in Manipur. The grass mahal and reserving the right to extract the grass was essentially interference into the traditional rights of the villagers, which they had been enjoying from time immemorial. As a sign of protest of this colonial grass law it often occur a conflict with the fishery or village land, the villagers used to oppose the leases.

Thus, it's found that the colonial authority had taken over the right to land form their own forestland. The authorities felled to check the over-extraction of timber. The forests were left unexploited only with the means of road and transportation system found difficult particularly in Manipur State.

Colonialism and *Jhum* Cultivation in Manipur

The nature nursed the hill tribal from their ancestral period. Agriculture was the backbone economy of Manipur State. They depended more or less upon natural (forest) resources in various forms. Forest and agriculture were the major resources of the tribe in which resources of agriculture form the key part for their livelihood as well as for commercial activities. The northeastern fringe of India is mountainous with dense forests with steep and rocky mountains in several parts of the major portion of the land is favours for *jhum* or shifting cultivation.

The Northeast region of India the practices, burnt and slash, wild fire, burning jungle for *jhum* cultivation. However, these practices are hitherto practicing and still it's suitable for the hill people to continue. The rural areas were environmentally more sensitive as their livelihoods mainly depended on natural resources for survival. It has found, the colonial authority concerned of, only of profits (i.e. revenue receipts).

Jhum Cultivation under British Forest Law and the Ecology

The British colonial intervention of the Manipur forests divided into Reserved Forests, Protected Forests and Un-classed Forests. The colonial authority opined, "the destruction of forests were regretted" however, they did not take-up an account to conserved the forest for the ecological balance but (as mentioned earlier) they were not cared for the forest conservation for the ecological purposes but rather for the profits making. The prohibitions of shifting cultivation in hill areas were because of the reason of road transportation expansion. They were not at all prepared any kind of substantial sponsored schemes to restrict or to discourage this type of cultivation also failed to develop any other subsistence form of livelihood. The construction of irrigational channels, which provides water to encourage terraced fields were not much provided for the wet cultivation too.

Furthermore, the traditional method of soil erosion control were not adopted and it don't mentioned during the colonial period, (i.e. construction of mechanical barriers using logs and poles, bamboos and trash, earthen bunds, vegetative barriers, etc.) which tribal were

well acquainted and could use them with no trouble also not seen encouraged based on traditional measures.

The practice of *jhuming* or rural modes of production in Northeast were the continuous process from the pre-independence British. Forests remained a part of tribal or *jhumias* social life, thus on their part they undertake the process of protection and managing the forest by the whole community, by clanship and sometime by the individual. The connection between lost of forest and *jhum* were questionable at best, as there were numerous other factors at play including areas, where *jhum* were practised. Ecologically, the practice of *jhum* had convinced by the experts that it has harmful effect on the local environment, on the others hand, some often thwarted those arguments and concluded *jhum* a sustainable form of agricultural production were best suited for the specific ecology of the hill regions like Northeast India.

The arguments against *jhum* based on, this mode of unsustainable practice that depletes the soil of nutrients, reducing the forest cover, causing landslides, etc. and many scientists who found favoured of this cultivation. Therefore, it's found that *jhum* cultivation has various positive trends at play (than the wet cultivation when it comes to the environment), and need to continue considering the importance of *jhum* to rural populations particularly in Northeast India, because it's a food sustenance through an egalitarian cooperative mode of agricultural production. At different levels, the colonial expressed to suppress the shifting cultivation, but rather work on ways in which it can be integrated with ecological and conservation concerns.

The Manipur State occupied the maximum *jhuming* areas (as per areas) in Northeast State of India also the only State which had also never been found the policy or programme to improve the *jhum* since from the colonial period (improvements of shifting cultivation through modern technologies were not introduced or imposed to them). The Manipur State even to this century failed to adopt the methods (based on modern technologies) as other State have been successfully concerned in different parts of the world so also in the Northeast of India.

Water Management

The study found that, in the valley of Manipur (under the pre-colonial period) water resources were taking good concerned by maintaining registered the lakes or the sludges and river. The embankment of river, keeping of drainage under the department called *pukhranba* and *lakpas* in the State.

Further, no records of pipe-water supply in Manipur prior to the British colonial even the Manipuri king dug and make used, only the pond (*pukhri*) waters. Even in the early colonial period (1892-93), there were no records of availability of pure drinking water. Till now this long past practice of traditional water resource management (private ponds and the community) are still found widely in used in the State (for instance the *Ningthem Pukhri* which was constructed during the Maharaja Garibnawaz, 1726 are the good example) Nevertheless the colonial asserted this pond water were hazardous to health the ‘in many cases ‘people found satisfactory to use pond water in the absence of a reliable water supply system or found not satisfactory’.

The study examined individually the valley and the hill tribal water resource management methods. In the hill, water were managed under which were of locally blend suited to meet their needs over the sharp and rocky mountains in several parts of the State, managed to access though difficulty was in their side to collect the water. The method was the system which have been tried and tested from the past to meet the requirement for the domestic water and agricultural needs.

However under the British colonial period, they used of pipe water (domestic purpose) only in Imphal valley (to save from epidemics course claims of impurities water contained, the germs of cholera). The first to levy a tax on water was introduced by the colonial authority in Manipur every household must paid the water tax. Steps were also made when water tax amount realised was fell and it was below expectation the scheme of collections of taxes were made by appointing a number of staffs. It’s seen that they even rejected the petition against the tax on water filed by the people of Manipur. The colonial claimed drinking of pond water were not safe, on health ground (the people live of by washing clothes and cooking utensils and bathing all in the same small tank, and

then drinking the water, that were highly injurious to health). The colonial authority extended funds for the renovation of ponds and giving some grant in aids towards the excavation of new tanks.

It also found that water was so much important that it used for the palace's fortification in India (The Kangla fort in Imphal). Besides, water as indispensable need for the people and the ecological functions and the like, it made a place for the game of entertainment on water by performing a great boat race every year prior to the colonial coming in the State.

But, nothing much worth has been formulated for the irrigational facility, an agricultural was based on existing rainfall schedules. The methods of streams channelisation, bamboo drips irrigation method, were widely in practiced, though no major and medium irrigation projects. The people mostly depend upon only in the spring water of mountain for most of their every need.

Water and Environment

The colonial authority has taken up various steps to improve the domestic water resource management and changes have been brought to Manipur State during their period. Floods common phenomenon confined to the Imphal valley which resulted to sickness and the diseases spread across the valley. The study found that the colonial concerned as their duty to protect the town as much as possible from the point of sanitation and epidemic as sickness frequently occurred which they opined these diseases and sickness were due to the result of washing clothes, cooking utensils and bathing all in the same small tank, and then drinking the water that was of highly injurious.

Flash floods were quite frequent within the urban settlement areas during rainy season due to poor drainage conditions. Policies towards dams, irrigations and hydro-electric projects under the colonial period in Manipur the policy were not much of appreciation ascertaining the possibilities of waterpower. Further the proposed for constructions of dams (Reservoirs of large size) were also not encouraged for the construction of large size Reservoirs would require high dams. Floods caused extensive damages to the

environment (polluting mostly the valley of Manipur), agriculture, human life and property resulted of hampering the entire State economy too. To improve the water value in Manipur under the 'Public Health' steps were taken up of river embankments during the colonial period.

Forest Society and Colonialism

Man depends on nature for his sustenance and creation of his civilization. There's a close relationship with his environment. Also, a large number of people depended on forests, for their particular way of life and it produces for their livelihood. After the middle of the nineteenth century, the customary rights on forest were becoming detrimental to the tribal interests. The forest policy (1884) curtailed the tribal's right to use their own forestland and its produces.

The British colonial intervened and steps were taken to manage the Indian forest resources by appointing the German forester Dr. Dietrich Brandes the first Inspector General of Forests of India. Under the colonial forest law, everything were restricted unless permitted, the Government could declare any class of trees in a protected forest or any trees in any such forest, to be reserved from a date fixed by notification, declared a portion of such forest to be closed or prohibit removal of any forest-produce. The village forests as well, the Government retained the authority to cancel or assign the rights to village community though these forests were to provide timber, other forest produce and pasture to the people.

Traditional forest management was organised in accordance with the local socio-economic and cultural realities, which best suited for them. However, since 1920s, the British colonial in India had attempted to be introduced new local forest management systems. The forest laws or rules imposed to them became a great hardship on the villagers and peasants of the country. The age-old practice of cutting trees for their housing, grazing their cattles, collecting forest products for food, hunting and fishing were declared illegal. The forest guard did not allow their entry into the forest for continuation of their age-old practice. Not more than some 'common lands' were permitted for cultivation, the farmers and peasants were given to access the common

land, grazed their cattle, collected firewood, fruits and berries for food but they were all bound by the colonial forest law. Also fished in the rivers and ponds, hunted in the common land for it provided them the means of survival only for the limited areas. In short everything were permitted under permission, the colonial owned the forest and its produce.

The enclosure or intervention of the forestlands by the colonial authority was the first step. For, each village has boundaries and land to belong to the community they looked after them by the village or the community. Though the tribal did not developed the notion of private property of forest however the relationship was expressed in term of mutual obligations. The forests and the lands provides livelihood to them and closed relationship and his environment. Every section of people less or more depended on forest in their particular way of life. The drastically changed of economy of the open field and the common lands by the colonial led to revolt or movement against the forest law by the tribal. There has been spectacular growth in public consciousness about the forms of environmental degradation in India in the recent past (like, the Chipko Movement and Bhopal deeply illustrated the social consequences of environmental degradation). The colonial government has taken a step to clear the forests, established the Department of Forest and the working plans for the management of the forests.

In the context of Manipur, 'to increase the State income were to extract more forest' and the land were to lease out the land which were not occupy or settle by the people, for the purpose of cultivating various products with the defined policy. The clearance of forestland and expansion of agricultural lands were the sign of progress as far the colonial authority opined. The British intervention of Manipur forest and conservation polices were for the commercial forestry rather than maintaining ecological balance or protecting the environment by preserving forest resources by leasing out the forest for the highest bidder. The colonial forestry extensively curtailed the right of the forest-dwellers in Manipur, classifying the forest into different categories by various forest Acts. Also disturbed the mode of production and resulted of deteriorated economic conditions over the period.

A clash between construction of roads and the *jhum* cultivator in the hilly areas occurred oftenly took place. In this regard, the President of Manipur State *Darbar* recorded in his tour diary that the Sub-divisional Officer of Tamenglong had been instructed to put up standing orders against roadside *jhuming*. However, the prohibition was just a mere forbid to prevent erosion and possible damage to the road by the felling of trees, as the safety road was the only motive behind for the colonial ruler.

Challenges and Changes in the Forest Societies under Colonialism

However, the long traditions of depending on nature were interceded by the colonial authority. Generally, the histories of forest conflict or struggle in India were seen, essentially as come from alternate conceptions of property rights and obligations. The tribal were confronted with the vagaries of the colonial market economy that continually eroded their life styles. Thus the creation of forest's movements in India during the colonial period were responsible to the British policies as generally opined i) tightened State control over forests areas ii) banned or restricted shifting cultivation iii) curbing hunting, timber use and grazing etc. however conservation of these forests were far distance from the environment conservation.

Forests form the principal resource of the State and the development of the forest. The forest laws passed by the colonial authority gradually began to lost their indigenous rights over their own forest land and resulted to revolted against them because of their exploitation and encroaching to their land (many a time it happened; eviction from their land, annulment of traditional legal and social rights and customs, against enhancement of rent, for transfer of land to the tiller).

The development of communication (telegraphic, roadways and railway services) and the introduction of the common administrative system ruined the natural economy of the forests. The forests were developed for the expansion of the colonial trade and commerce, and for the movement of the colonial troops. In Manipur, the forest laws like indiscriminate cutting of wood were prohibited and none can cut wood for sale even grazing cattle from Reserve forest without a permit or permission from the Forest Member and the like from the day when the separate Forest Department in Manipur and

the bifurcation of Manipur forest from the Assam forests based on scientific management began. However, in case of hill forest this policy could not be wholly implemented for there was strong opposition against by the people especially between the forest contractors and the tribal Chiefs. The tribal chiefs claim the rights of ownership of forest lands as they felt that all forest wealth including forest lands belonged to them. Any development programme taken up by the Forest Department for better management of forest resources were regarded by the forest dwellers as an infringement of their natural rights, because the colonial forest policy was to be expanded the exploitation and used of timber rather than raise its costs, by classifying the forests as Reserved Forests, Protected Forests and Un-classed Forests. The traditional rights of the indigenous people in the matter of using the forest produce were at the hand of the rich and influenced contractors. This losing of traditional rights by the indigenous people resulted to conflicts with the leases and the villagers many a time. The colonial forest laws brought numerous impacts to the land use system of the people the British turned into tenancy systems. Introduced a market economy (economically) and resulted to create a class of trader too. The tribal tenants had to pay the rent in cash. As they did not have cash with them, they had to borrow from the money-lenders. In these ways, the British introduced class of trader, money-lenders and contractors (Thekedars) in the tribal areas.

The forest policy of the colonial government affected the life of the indigenous forest dwellers. The commercial forestry benefitted small sections of the people who changed their profession to trader profession. The forest laws changed the life style of the tribal communities for hunting and fishing rights were banned by the colonial. Many ignorant tribal were punished for breaking these laws.

The form of resisting movement against the British authority by the tribal (forest law) may perhaps different to some extent in the form of exploitation. However, the movements against the new forest law in the State were far from different of being deprived of their belongings from other parts of India. The hill tribal showed their disrespect of such new colonial forest law in the middle of the 19th century. The degrees of resisting were not highly challenged, however the movement against the colonial

authority had taken place by the hills tribal though the movement brought unchanged to the colonial forest authority.

Thus, the impact of Colonial forestry had wide consequences to be observed the enriching part of Indian forestry by the British and their collaborators was overwhelmingly negative that it caused irreparable environmental damage, jeopardised the livelihood of communities who subsisted on forests. For, their main objectives were only to secure the percentage share. This can be reflected the DFO of Cachar who instructed by the Assam government “not to work for the improvement of the forest except the work of collection of royalty”.

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