

## PRE-COLONIAL AND COLONIAL FOREST CULTURE IN THE PRESIDENCY OF BENGAL

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**Abstract:** Indian forest based culture has a long history. Until the British colonial rule (1757 -1947), Indian forest has been controlled and used by several monarchies. The features of forest based livelihoods were also quite different from one period to another. Before Muslim period, Indian forest used to be considered as an important source of resource, but exploitation was quite less compared to total forest cover. People used to admire native forest for the role it used to play. However, during Muslim and early British period (East India Company period, 1757 – 1857) forest was considered only as the source of timber. To produce farmland a considerable amount of forest cover was also destroyed. After the handover of the colonial power (1857), the British government realised the importance of forests for revenue generation and implemented several rules and regulations to control the 'illicit' timber felling. This forest management strategy was followed even after independence (1947) until the JFM system was implemented.

**Key words:** Forestry, Bengal, Colonial, Livelihoods, Culture.

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### Introduction

From the Indian epic histories (e.g., the 'Ramayana' and the 'Mahabharata') and mythologies, it is clear that many ancient Indian civilisations had a very close relationship with the forest. A dense forest covered much of the country and the original inhabitants were the aboriginal people whose livelihoods were based on hunting and gathering (Schlich, 1906). They not only lived there to collect forest-products for their daily household purposes, but also saw the forest as a safe and secure place to live.

"...palaeobotanical evidences testify that there were dense forests in the country [India]. The Palaeolithic and Mesolithic men of India could not carry out felling of trees, but Neolithic men used stone axes to cut trees for constructing houses and other purposes. However, the negligible human

population of that period hardly had any adverse effect on the forest wealth." (Upadhyaya, 1991, p. 114)

For the supply of food, accommodation, fodder, fuel-wood and even cosmetics (wild gems), the forest was an important source of subsistence for forest dwellers. They considered the forest as their beloved home offered by God almighty. It was clear to them that their lives entirely depended upon the survival of the forest.

"There are evidence[s] of trees being worshiped and respected during this period [later Vedic and Epic age]. Deforestation was not advocated as it would result in poor rainfall. It has also been advocated that those who want progress in their family and wealth should not cut trees." (Upadhyaya, 1991, 115)

People of those days had a good knowledge about forests and the uses of forest products. They knew very well which products

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they should collect and how much they should collect. They were especially concerned about the protection and conservation of natural resources. This knowledge developed year after year through their practical experiences (Gadgil and Guha, 1992; Tewari and Isemonger, 1998; Kulkarni, 1983).

“In ancient times forests were regarded as abodes of spiritual solace and the concept of preserving forests and wild life developed around the ‘ashrams’ (hermitages) of the sages. These forest-based ashrams propagated ‘*Aranya Sanskriti*’ or a forest culture and human understanding of the fundamental ecological utility of forest ecosystems and their economic importance ... Indian thought and culture flourished around the ashrams in our vibrant forests and provided the society with both intellectual guidance and material sustenance.” (Rawat, 1991, p. 130-131)

In short all throughout Aryan (3000 – 1200 BC), Vedic (1200 – 500 BC), Mauryan (322 – 185 BC) and Gupta (320 BC – 540 AD) periods forest used to be treated as a source of enough resources and, at the same time, forests were worshiped. However, during Muslim period forest did not receive any extra value, emotional or spiritual, like the previous phases. Forest products used to collect without giving any priority for future save. The tradition continued until the end of the East India Company period (1757 – 1857). The British colonial period in India can be divided into two phases – East India Company period (1757 – 1857) and the British Government period (1857 – 1947). During East India Company period, forest products including timber and non-timber used to collect as it was throughout Islamic period (1000 – 1750).

The theme of the paper is to reveal the evolution of forest based culture in the Presidency of Bengal during pre-colonial and colonial periods. The study of historical background might be useful to analyse the present trend of forest culture in the state of West Bengal.

## Source of data and the objectives of the paper

This paper has been written mainly based on secondary source of information. The data and information were collected from the archives, available at the British Library, London. Annual forest reports, revenue reports, documents written by the Forest Department staff to the British Government were referred. Books and articles written on Indian and Bengal forest history have also been followed.

The aim of the paper is to reveal the features of forest and forest products based lifestyle during pre-colonial and colonial period in the Presidency of Bengal. The historical knowledge about forest and forest culture might be useful to examine the existing forest policy and the livelihoods of forest fringe indigenous people in Bengal. To achieve the aim of the paper a few objectives were outlined. Objectives include the revealing of the features of forest covers, forest products based livelihoods, forest-based culture and forest offences. There is no government record about pre-colonial forestry. From British period, however, particularly after the establishment of Bengal Forest Department (1864), there are well-maintained data and information available about the forestry of the Presidency of Bengal.

## Pre-colonial forest culture in India

In about 2000 BC, the Aryan people came to India. Their main occupation was pastoralism and agriculture so they cleared a considerable amount of forest cover of India for farming. The burning of Khundava forest by the Kshetriya people was, as described in the *Mahabharata*, ‘the first semi-historical evidence’ of forest destruction in India. In Rigveda, the evidence of using plants as medicinal herbs is available. For making agricultural implements, chariots, utensils as well as for household purposes, wood and non-wood products used to be collected throughout Vedic period (Rawat, 1991; Upadhyaya, 1991). However, Ribbentrop (1900) argued that it did not have a major impact on

Indian forest or the forest dwellers, because little of the forest was destroyed. Even during the Brahminical and the Buddhist period, most of the country was covered with forest.

From the 'Arthashastra' of Kautilya (350 BC - 283 BC) and 'Indica' by Megasthenes (350 BC - 290 BC), it is found that the emperors Maurya (321 BC - 184 BC) and Gupta (280 - 550 AD) used to collect revenue from timber and non-timber forest products. They even had a well-organised Forest Department for the management of forest and forest products. Forest officers used to take initiatives to increase forest cover and forest products (Rawat, 1991). "In 'Arthashastra' legal classification of forests has been given and three main classes of forests have been named as: (1) reserved forests, (2) forests donated to eminent Brahmans, and (3) forests for public use. Reserved forests were of two types: (a) reserved forests for the king mainly for purposes of hunting, and (b) reserved forests for the state which were open to the general public (Upadhyaya, 1991, p. 116)."

According to the Chinese traveller Huien Tsang (602 - 664 AD), after the Gupta period (7<sup>th</sup> century AD), India's territory was divided into several states, which were ruled by a number of kings (Upadhyaya, 1991). They used to fight with each other for the expansion of their kingdom. Beside this, several foreign invasions also happened during this period. This situation continued until the 14<sup>th</sup> century. There was no policy for the protection and improvement of forest and forest products. This situation affected Indian forest and forest livelihoods adversely.

During the Mahomedan period, the continuous intrusion of nomadic tribes destroyed a large portion of forest land in the Indian sub-continent. According to Ribbentrop:

"No religious scruples prevented the Mussalman from destroying forest which [was]...declared to be a free gift of nature, the property of everyone, in the same way as water." (Ribbentrop, 1900, p. 33-34)

The nomadic tribal people used to convert forest land into pasture land for crop cultivation or cattle farming. The continuous

destruction of forest areas for about 750 years under the Mahomedan rulers also hampered the livelihoods of original forest communities, who had been living for some thousands of years in Indian forest areas. During the Mughal period, a few forests had also been declared as restricted areas to ensure a good hunting environment for Mughal emperors (Ribbentrop, 1900).

Until the British colonial period in India, a large number of people (mostly indigenous tribal communities) used to live in or around forest areas depending entirely on forest products (Fried, 1975). These people believed themselves to be the actual owners of forest with rights to use forest products for their subsistence purposes (Ghate, 1992). Ritual, cultural as well as social celebrations were strongly interrelated with the forest environment.

For these people, the entire forest area was their home. They used to move from one area to another to collect food, fodder, firewood, wild game and many other products for their subsistence purposes. They used to sell or barter very little to outsiders to get non-forest products. Before the East India Company's rule (1757 - 1857), there was no restriction on forest and forest products collection for forest people in India apart from forests reserved for hunting for rulers (Chowdhuri *et al.*, 1992; Schlich, 1906).

"In pre-British India the cultivated land was producing a great variety of crop [sic], and the non-cultivated [especially, forest] land a variety of plant and animal produce largely for fulfilling the subsistence needs of the local populations. This ...[during colonial period] had to be changed with cultivated lands focusing on the production of a few crops, like cotton, jute, indigo and tea and the non-cultivated lands with a few choice of timber species like teak (*Tectona grandis*), primarily for export to Britain." (Gadgil, 1991, p. 27)

### Forest livelihoods in the colonial Bengal

During the colonial period (1757 - 1947), Indian forests were used as an important

source of revenue. The British East India Company's main target was to strengthen their rule over India (which they won at the Battle of Plassey in June, 1757) and to increase their revenue from forest products. They had no policy or plan to protect Indian forest and forest products. In his book *'Forestry in British India'*, Ribbentrop said:

"Our earlier administrators (British East India Company), occupied with the building up of an Empire, probably never thought of the important part forests have always played, play now, and will forever play in the household of nature .... The people took all that they required for their simple wants where they found it. Trade in forest produce and wood-consuming industries were in their infancy ... no apprehension was felt that the supply of forest produce would ever fall short of the demand, and forests were considered as an obstruction to agriculture ... and consequently a bar to the prosperity of the empire." (Ribbentrop, 1900, p. 59.)

To control the collection of forest products by native forest dwellers, the British Government implemented a number of rules and regulations.

Due to the need for timber for constructing railway tracks, developing ship-building industries (especially for the Royal Navy), making furniture, providing a continuous supply of fire-wood and for the exportation of timber to Britain, heavy pressure was placed on Indian timber forests during this period (Schlich, 1906; Guha, 1989).

"Early years of British rule [during the period of the East India Company rule] were characterized by the most thoughtless exploitation of teak wherever it occurred. Thus Munro, writing in 1838, states: "The system of throwing open teak forests to all who wish to cut, or giving them to constructors, is in the highest degree ruinous. They cut indiscriminately all that comes in their way; any range of forests, however extensive, would be destroyed if left to their tender mercies. They never think of planting all that such speculators calculate on its present profit or loss, without troubling their heads about depriving future generations of the benefit they now enjoy". (Gadgil, 1991, p. 29)

After the transfer of power from the East India Company to the British Government (1857), however, the British Government realised that timber supplies needed to be conserved and tried to protect forest areas, converting them into government property (Grove, 1996). To achieve the monopoly power over Indian forest resources (mainly timber), the British Government had to control local inhabitants' rights by implementing strict rules and regulations. Later on these policies caused fury among forest communities (Joshi, 1983).

All over India, the same policy was implemented to protect commercially valuable forests from illegal felling and to control the collection of forest products, ignoring the forest-based livelihoods of the native people. The British Government controlled most of India (including Pakistan and Bangladesh) centrally. There were some areas under *Rajas* or *Nawabs* (local kings), but in most cases they had no plans or policies regarding the management and protection of forest or forest products.

British forest policies were enacted for the purpose of conserving future supplies of timber, forest products and wild animals and to increase revenue from such items, while the thoughts and livelihoods of local forest dwellers were largely ignored (Weil, 2006). To control the collection of Teak timber for the Royal Navy from the Malabar hills of India (Western Ghats), a committee was set up in 1805. This was the first committee regarding the control of timber collection from any Indian forest area (Schlich, 1906). However, the target of this committee was to ensure a future supply of Teak for the Royal Navy rather than to conserve the forest as a whole.

Following the proposal of this committee, Captain Watson was recruited as the first Conservator of Forest in India in 1806. Until 1823, the post of Forest Conservator worked to strengthen Britain's unjustified monopoly over Indian Teak forest. In 1831, the post started working according to the recommendation of Indian Navy Board and, in 1847, a small Forest Department was set up by the then Conservator of Forest, Dr. McClelland. In the mid-nineteenth century, British India was one of the first countries in

the world with a national forest service. It had this even earlier than the United States (Poffenberger *et al.*, 1996).

In 1854, Dr. McClelland submitted a report regarding the rapid destruction of Indian timber forest by private companies and local people. On the 3<sup>rd</sup> August 1855, Lord Dalhousie issued a guideline (forest policy) for the conservation of forest products. From this time, 'scientific forestry' started in India. Local people and other non-permit holders lost their rights to enter the forest areas to collect timber or NTFPs. The guideline was again modified in 1894 (Chowdhuri *et al.*, 1992).

The demarcation and nationalisation of Indian forest started from the 1850s. Subsequently, open forest areas started to be converted into reserved forest areas, where without [colonial] government permission nobody could enter for the collection of timber and non-timber forest products. The total forest area and type (reserved or open) varied from year to year during the entire British colonial period (1757 – 1947).

In 1856, Dr. Cleghorn, the Conservator of the Forest of Madras and Dr. Gibson, the Conservator of the Forest of Bombay submitted a report giving special emphasis to the importance of forests from an ecological point of view. After 1860, the British Government implemented a more commercialised forest management policy in South Asian countries to increase revenue from forests (Weil, 2006). However, it failed because of the geo-physical and socio-cultural variations from one place to another. In 1864, Mr Dietrich Brandis was given the post of the first Inspector General of Forest to the Government of India. Later he argued that to preserve the Indian forest, the involvement of native people was essential. In 1864, the Forest Department of Bengal was set up and a Conservator of Forest was also recruited. The first Indian Forest Act was issued in 1865. Later this Act was modified in 1873-74 and again in 1878. In 1924, a new Indian forest Act was implemented replacing the previous one (Ribbentrop, 1900).

Following the Voelcker Resolution<sup>1</sup> (1894), Indian forests were divided, for the first time, into several categories according to their importance. These were reserved forests (which was entirely under government control), protected forests (where forest dwellers could enter to collect food and fodder but if needed government could stop it), and unclassed state forests (where the government used to give permission to forest communities to collect forest products for their household needs) (Gadgil and Guha, 1992). In the Indian Forest Act of 1927, however, the criteria had been decided, to be followed, for the categories (reserved, protected or unclassed state forests) of Indian forests (Department of Forest & Environment, 1927; available at: <http://envfor.nic.in/legis/forest/forest4.html>, cited on 26<sup>th</sup> May 2008).

During the colonial period, the same policy was implemented in all over British India, including Pakistan and Bangladesh. Sivaramakrishnan (1999), however, has described how the uniform forest policy of the British failed to work properly because of the regional socio-physical variations. To him, the effective protection of forest and forest products required local peoples' knowledge and historic experiences to be utilised and given priority over imported forest management techniques.

According to Karlsson (2001), British 'scientific forest' policy forced some tribal communities (e.g., the Rabha – a tribal community of the Duars area) of Sub-Himalayan Bengal (currently known as West

<sup>1</sup> "In Chapter VIII of his report on the improvement of Indian Agriculture, Dr Voelcker dwells at length upon the importance of so directing the policy of the Forest Department that it shall serve agricultural interests more directly than at present, and in his Review of Forest Administration for 1892-93 the Inspector General of Forests discusses in some detail the principles which should underlie the management of State forests in British India, ... The sole object with which State forests are administered is the public benefit. In some cases the public to be benefited are the whole body of taxpayers... but in almost all cases the constitution and preservation of a forest involve, in greater or less degree, the regulation of rights and the restriction of privileges of user in the forest area which may have previously been enjoyed by the inhabitants of its immediate neighbourhood. This regulation and restriction are justified only when the advantage to be gained by the public is great..."

(Source: <http://www.nlsenlaw.org/forest/law-policy/old-forest-policy-october-1894/>; cited on 24<sup>th</sup> July 2008)

Bengal) to change their aboriginal lifestyle and to stop their practices of shifting cultivation. To protect forests and for the collection of forest products (mainly timber), some tribal people had been used as permanent forest labourers. To accommodate these labourers, a number of 'forest villages' were set up within reserved forests (Forest Act, 1865 and the Forest Policy, 1894).

According to Chowdhuri *et al.* (1992), other people living in or around these forest villages, but with no legal right to occupy them (or not included in *Khatiyans* part 2), were known as *faltus* and relied heavily on bonafide forest villagers for their subsistence (Jewitt, 1995). With the implementation of the 1865 Forest Act, these *faltu* people lost their rights to enter or collect forest products from reserved forests, but the situation was the same as it was before in the case of protected and unclassified state forests. The fieldwork for this research was conducted in protected and unclassified state forests of Purulia, Bankura and West Midnapur districts of West Bengal, where forest dwellers have been living in the forest vicinity for centuries and are dependent upon forest products.

The forceful implementation of scientific forest policy stimulated indigenous forest dwellers to collect forest products (particularly foods, fodder and firewood) illegally, ignoring the British Forest Department's rules and regulations. By doing this, they tried to demonstrate their age-old rights to use Indian forests. Sometimes they became violent and set fire to the reserved forests (e.g., 1916 – Uttarakhand forest-fire, Guha, 1989).

British forest policy mainly emphasised the conservation and collection of timber products. Most other forest products (minor or NTFPs) received comparatively less priority, although the collection of bamboo and grass received special attention. Other important NTFPs normally collected for commercial purposes were caoutchouc, cardamoms, lac, myrabolans and resin. Together, these NTFPs represented an important resource bringing average annual revenue of 11,806,302 pounds (Table 1). Only villagers authorised to do so by the Forest Department could collect forest products from

Table 1: Average Annual Imports of Minor Forest Products in the United Kingdom from India

Name of the Minor Forest Products	Value
Caoutchouc	£6,027,050
Gutta-percha	1,180,296
Dye-stuffs	518,014
Dye-wood	249,412
Myrabolans	170,876
Gums of various kinds	1,305,683
Oil of turpentine	834,574
Resin	528,728
Galls	76,807
Pitch	42,966
Tar	92,706
Vegetable fibres	779,190
<b>Total Value</b>	<b>11,806,302</b>

Source: Schlich, 1906

reserved forests. Other local people used to collect forest products for their subsistence or commercial purposes from protected or unclassified state forests.

These minor products (NTFPs) also had a very important role in forest communities' livelihoods. Thus, in some areas, forest communities started to set fire to the timber forests specially rather than the mixed forest, from where they used to collect NTFPs including fire-wood and fodder for their household purposes (Guha, 1989). It was a protest against the Forest Department's decision to control forest products collection by forest fringe dwellers from reserved forests.

Though most of the British colonial officers put the need for commercial timber above the subsistence requirements of local people, a few were sensitive to the impact of forest policy on local livelihoods. Verrier Elwin, Stebbing, Dietrich Brandis and Voelcker were among them (Jewitt, 1995). They gave special emphasis to the importance of forest livelihoods and argued for forest policy needed to be more sensitive to the requirements of forest dwellers. As the number of forest officers were insufficient to tackle all the forest related problems, it was necessary to involve local people regarding the conservation of forest and forest products (Barton, 2000; Guha, 1989). Elwin, for example, argued for the establishment of village forest councils (*Van Panchayats*)

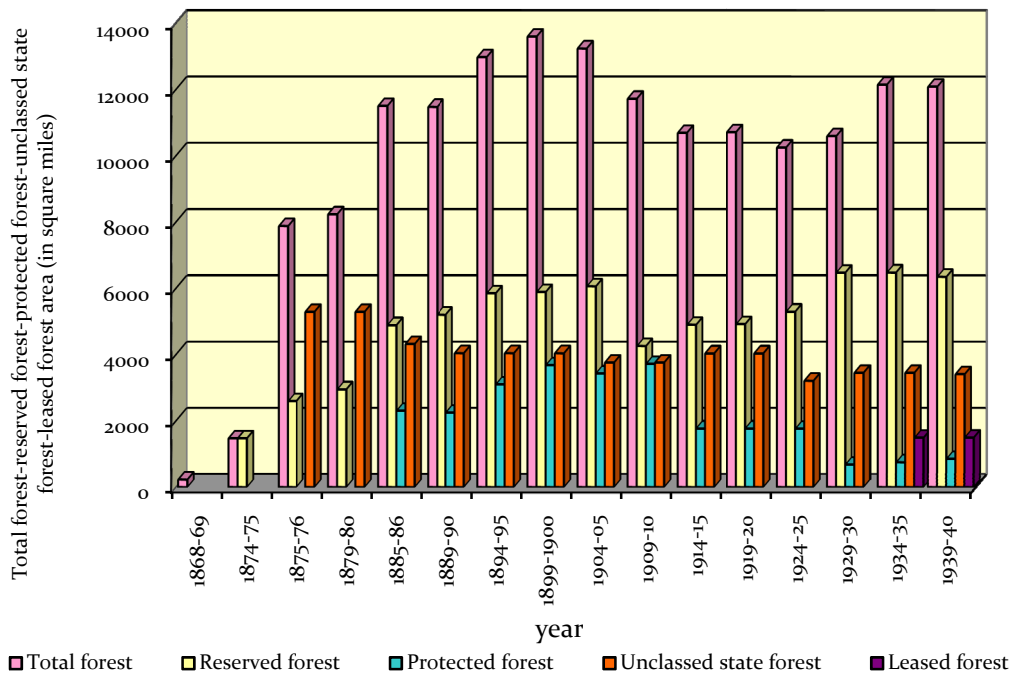


Figure 1. Total forest, reserved forest, protected forest, unclassified state forest and leased forest area in the Presidency of Bengal (1868-1940)

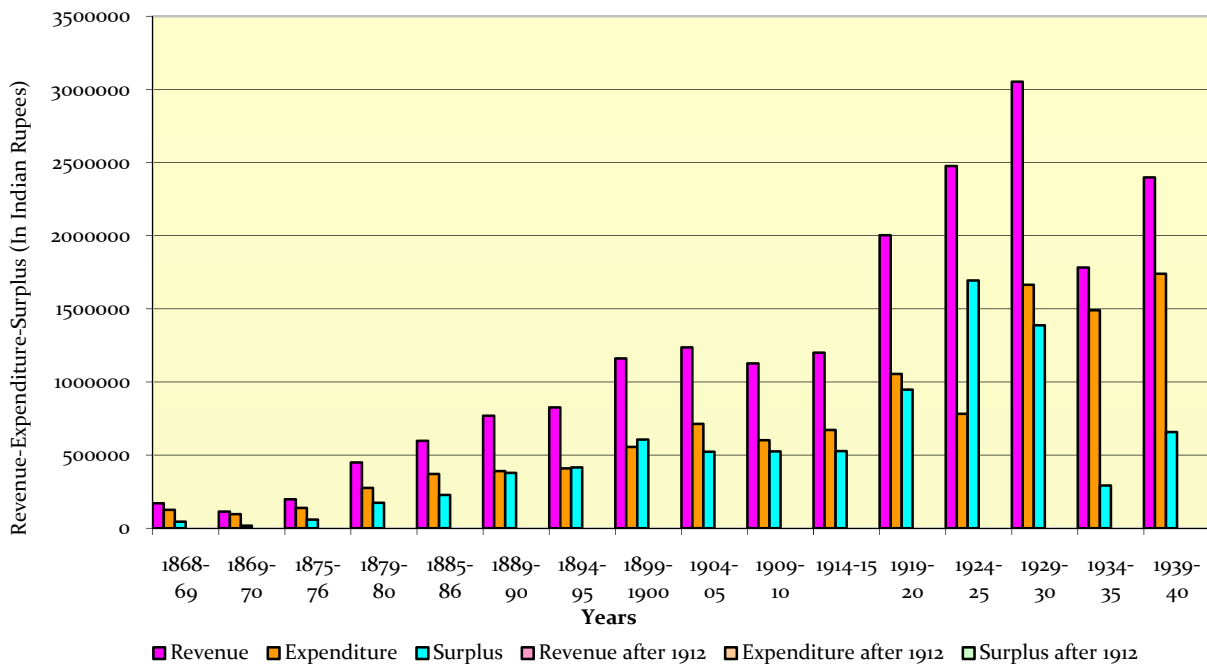


Figure 2. Revenue-Expenditure and Surplus from forest and forest products in the Presidency of Bengal (1868-1940)

during negotiations over the Indian Forest Act 1924 (Gadgil and Iyer, 1989; Jewitt, 2002).

The following figures (1, 2, 3 and 4) illustrate the forest features of the Presidency of Bengal and the importance of NTFPs during the British colonial period. The total forest

area (fig. 1) of the Presidency of Bengal varied from year to year, because of the changes in the total area of the Presidency. In 1868-69, the total officially recorded forest area in the Presidency of Bengal was just 220 miles<sup>2</sup>, which increased to 12,073 miles<sup>2</sup> in 1939-40.

The total reserved forest was increased considerably within this period. In 1874-75, it was only 1,467 miles<sup>2</sup> whereas in 1939-40 the total reserved forest was 6,338 miles<sup>2</sup>. However, the protected forests and unclassified state forests decreased from 3,675 miles<sup>2</sup> and 4,033 miles<sup>2</sup> in 1899-1900 to 847 miles<sup>2</sup> and 3,399 miles<sup>2</sup> in 1939-40 respectively. With the increase of reserved forests the revenue from

forest products were also increased during the colonial period. It was because with the upgrade of forest cover, the quantity of forest products was also improved.

The total revenue (figure 2) collected from forest products including timber was Rs. 171,184.00 in 1868-69. The expenditure during the same period was Rs. 126,256.00, producing a surplus of Rs.<sup>2</sup>. 44,928.00 (Table 2).

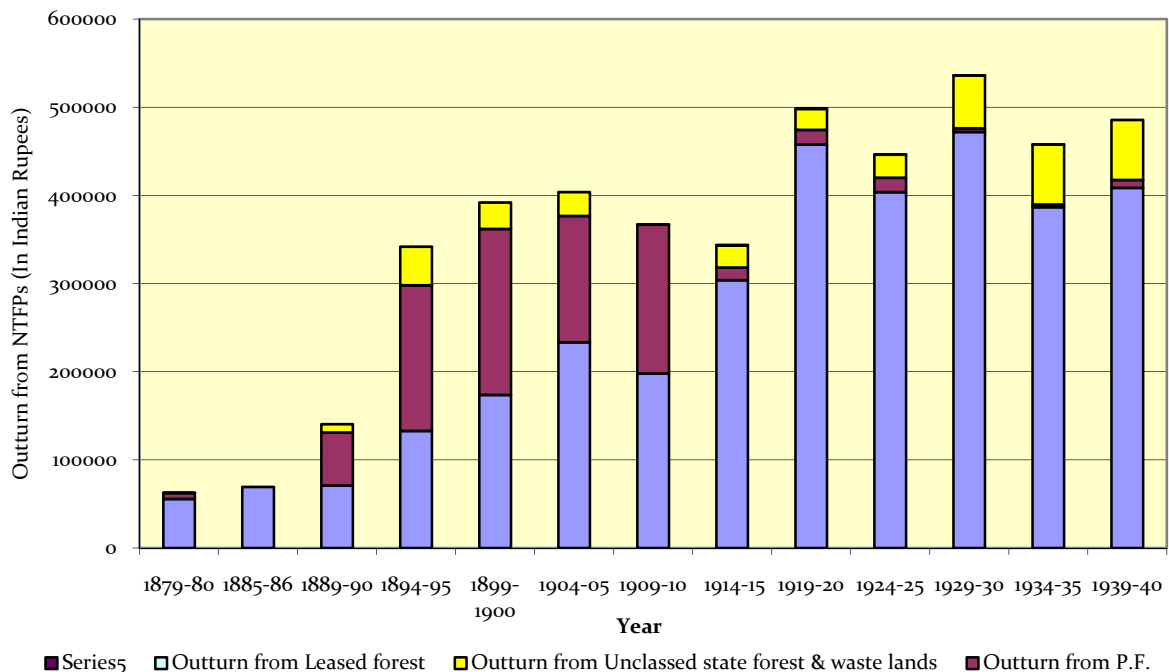


Figure 3. Outturn of NTFPs from reserved forest (R.F.), protected forest (P.F.), unclassified state forest and leased forest area in the Presidency of Bengal (1879-1940)

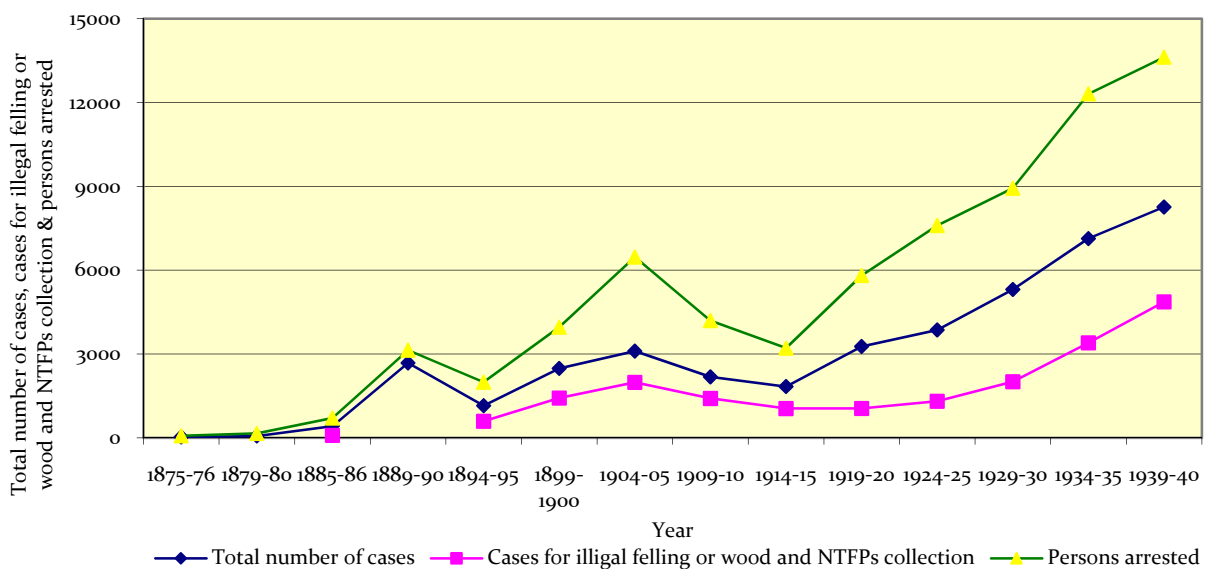


Figure 4. Total number of offenses, cases for illegal felling or wood and NTFPs collection and the persons arrested in the Presidency of Bengal (1875-1940)

<sup>2</sup> Rs. - Indian Rupees.



Table 2. Exchange rates between the Indian Rupee (INR) and the British Pound (GBP)

Period	Price of silver (in pence per Troy ounce)	Rupee exchange rate (in pence)
1871-72	60½	23 ⅛
1875-76	56¾	21⅝
1879-80	51¼	20
1883-84	50½	19½
1887-88	44⅝	18⅞
1890-91	47 11/16	18⅞
1891-92	45	16¾
1892-93	39	15

Source: Dadachanji, 1934, p. 15.

In 1910-11, the total forest area decreased because of the exclusion of some districts from the Presidency of Bengal. Therefore, the revenue, expenditure as well as surplus also decreased to some extent. However, with the conversion of protected and unclassed state forests into reserved forests, their management improved and became more systematic. Simultaneously, the revenue, expenditure and surplus from forest products again increased in the following years. In 1939-40, the total revenue collected from forest products was Rs. 2,398,085.00 whereas the surplus was Rs. 658,033.00.

During the colonial period, NTFPs were collected for commercial and local purposes. In 1879-80, the total outturn from NTFPs was Rs. 62,703.00 (Graph 3). The greatest amount of NTFPs normally used to be collected from reserved forests. Until 1910-11, the outturn from NTFPs was quite similar from reserved forests and protected forests. However, after 1911-12 with the changes of total forest area and conversion of protected forests to reserved forests, the outturn from NTFPs increased in the reserved forests. In 1939-40, the total outturn from NTFPs was Rs. 485,685.00 among which 84.14% (Rs. 408,659.00) was collected from reserved forests.

The total number of forest offences (such as illegal timber felling, hunting wild-animals, harvesting of NTFPs from reserved forests without Forest Department permission) increased throughout the colonial period (Graph 4). It was because of the conversion of open forests into reserved forests and the implementations of strict rules and regulations on the collection of forest

products by forest dwellers (Jewitt, 2002). Many local forest dwellers, who were ejected from reserved forests, used to continue to collect forest products ignoring forest regulations. In 1875-76, a total of 30 legal cases were taken out against local people for 'forest offences' and 70 people were arrested. In 1939-40, by comparison, the total number of cases was 8,261 and 13,621 people were arrested. Among them, 4,866 people were arrested for the collection of NTFPs including fire-wood (Government of the Presidency of Bengal, 1869; 1875; 1880; 1885; 1890; 1895; 1900; 1905; 1910; 1915; 1920; 1925; 1930; 1935 and 1940).

## Conclusion

In conclusion, it can be said that until Muslim period the Indian forest had an imperative position in Indian lifestyle. During Muslim period and in the first half of British period (1757 - 1857) a large amount of forest were destroyed to produce timber as well as cultivated land. However, the British government realised the importance of Indian forest and forest products in terms of environmentalism (Barton, 2002). Still it is a debated matter that the British government implemented rules and regulations to safeguard the forest for future or just to ensure to increase revenue from forest products. Nevertheless, the 'scientific' British forest policy had become useful to control boundless timber felling by native forest dwellers as well as outsiders. After independence (1947), the Indian government followed the British forest policy for about three decades to control the post World War forest degradation, but compelled to change their strategy with time. Subsequently, the Joint Forest Management (JFM) system was introduced in Indian forest management. Therefore, finally it can be said that the study about the ancient forestry and the forest based livelihoods, occasionally become convenient to understand the present trend of forest features.

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