

Forest Products and its Importance in 19th Century (With special Reference to Colonial India)

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Abstract: *After the colonial intervention, the colonial government encouraged the British iron-making industries and gave out some exclusive privileges during the early nineteenth century. Since the early nineteenth century, the colonial government emphasised the extraction of iron ore. In 1824, Thomas Munro observed that '... the richness of the ores of Salem and other districts have been known above thirty years, without anything having been done to extend their produce, and he suggested that the State has to extend the support for extracting the resources'*

Keywords: wood, sandal wood, timber, oil, teak, coffee, tea

1. Introduction

The forests of Indian Empire extend between the eighth and thirty-fifth degrees of north latitude, and flourish at elevations varying from sea-level to 12,000 feet and more. Although the changes in the characteristics of the vegetation between these limits must necessarily be of considerable importance, yet those due to differences in latitude alone are not so marked as might be expected from comparison with similar circumstances in Europe, nor is any abrupt demarcation of species apparent. While some trees are characteristic of Southern or Northern India, others are distributed in suitable localities over the whole area of the country; and it becomes evident that the forest vegetation cannot be classified by distance from the equator alone, but that other and more effective influences have to be considered. Of these the principal is the rainfall, which by quantity and distribution, regulated chiefly by the geographical position and physical features of the locality, decides to a great extent the character of the most important forest growths.

2. Objectives

- 1) To find out Nature of the Forest in India
- 2) To find out British Needs towards Indian Forest
- 3) To find out Exploitation of Forest Products Under Colonial

When we study human history under the framework, four distinct moods of resource use can be identified; gathering (including shifting cultivation) nomadic pastoralist, settled cultivation, industrial mode of resource use. (MadhavGadgil and RamchandraGuha, Op. cit., p.12.) In assessing the ecological impact of different modes, one is struck by two paradoxes, which is illustrated with respect to forest use. Spatially, hunter-gatherers live in forest; agriculturists live in adjacent to but within striking distance of the forest, and urban- industrial men live away from the forest. Paradoxically, the more the spatial separation from the forest, the greater the impact on its ecology, and the further removed the actors from the consequences of this impact. The same conditions operates with regard to other resources, such as water, second, the faster the development of formal, scientific knowledge about the composition and functioning

of forest types, the faster the rate of deforestation. One important reason here is undeniably higher levels of economics activity, but another thoughtless obvious factor is the idiom of resource use itself.(opcit).

Timber Extraction for the Fleet

The Britishers were forced to find timber resources from India since scarcity cropped up for timber from the construction of the fleet in England during the latter part of the eighteenth century (Stebbing 1922:34). The early colonial rule mainly focused on extracting teak timber to meet the demand of King's Navy in England in the early nineteenth century (Stebbing 1922:63, Pathak 2002:19). Subsequently, the Company proclaimed that the royalty right of the teak trees belonged to the Company and also prohibited unauthorized felling of these trees (Stebbing 1922:64). Increasing pressure from England to ensure the future supply to the King's Navy, the Company appointed a Conservator of Forests in 1807 'to preserve and improve the protection of teak and other timber suitable for shipbuilding' (Stebbing 1922:64). Soon the conservator established a timber monopoly throughout Malabar and Travancore regions. Since the early colonial rule, '... destruction of the more accessible forests increased during the early days of British occupation' (Stebbing 1922:34). These measures were contested both by the proprietors and merchants, which led to abolition of conservator post itself (Stebbing 1922:64). In short, the early colonial rule extracted the forest resources mainly to meet the demand from their own country. Any attempt to protect the forest was not really to conserve it but to ensure the future supply, particularly to meet the demand in England.

Table 1: Value of Timber and Wood Exports from Madras Presidency: 1855/56 – 1875/76

Year	Value (in Rupees)	Year	Value (in Rupees)
1855-56	736117	1866-67	930878
1856-57	853704	1867-68	979671
1857-58	882080	1868-69	1307459
1858-59	884444	1869-70	1228689
1859-60	847820	1870-71	1013878
1860-61	931317	1871-72	1022367
1861-62	1237475	1872-73	1014176
1862-63	1144023	1873-74	1028803
1863-64	1570559	1874-75	1065906

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1864-65	1606538	1875-76	1045109
1865-66	1654166		

Source: Maclean, C.D (1885), Manual of the Administration of the Madras Presidency, p.344

A large quantity of timber and wood has been exported from the Madras Presidency to Arabia, Ceylone and other countries besides a large quantity to the interprovincial trade to Bombay, Scinde, Bengal and Burma (Maclean 1885:344). For instance, about Rs.22985179 worth of timber and wood was exported between 1855/56 and 1875-76 (Table 1). It shows that the forest resources have been to the other countries for commercial purposes during the early nineteenth century.

Extraction of Sandalwood

Since the early nineteenth century, a large quantity of sandalwood from the hills/forest was extracted to export to other countries for commercial motives (Saravanan 1998). In fact, the colonial government encouraged the middlemen to export the sandalwood by providing the required facilities. A large quantity of sandalwood was extracted from the different districts of the Madras presidency since the early nineteenth century. For example, about 62,984-11¼ mounds¹ of sandalwood was delivered from Coimbatore district alone to the Board of Trade between 1799 and 1809 and it was worth of 104,915 Star Pagodas² 9 Fanams³ 8 Cash⁴. The colonial administration encouraged the extraction of sandalwood for the commercial motives in different parts of Madras Presidency (Saravanan 1998).

Sandalwood trees were largely found in the different hills of Salem and Baramahal regions. After the colonial intervention, these sandalwood trees were extracted for commercial purposes and even exported to other countries like China. For instance, in Salem district alone, revenue from sandalwood was about 3,776 – 30 – 40 Star Pagodas in 1800-01.⁵ The Collector had reported that about 200-400 candies⁶ of sandalwood could be supplied from

Table 2: Revenue from Sandalwood and other sources from Salem and Baramahal regions: 1862/63-1875/76 (in Rupees)

Year	Revenue from Sandalwood	Year	Revenue from Sandalwood
1862-63	8573	1869-70	14550
1863-64	9758	1870-71	9153
1864-65	13068	1871-72	4594
1865-66	10292	1872-73	4441
1866-67	15261	1873-74	7502
1867-68	17110	1874-75	4754
1868-69	15929	1875-76	12552

Source: Letter from colonel R.H.Beddome, Conservator of Forests to J.H. Garstin, Acting Secretary to Government, Revenue Department, dated 22 December 1876, TNSA. the district annually.⁷ Later, the right to cut sandalwood was leased out to private contractors. Around 1836, the government engaged itself to ascertain the number of sandalwood in different hills and it came out that the precious trees were in plenty in different hills of Salem district.⁸ Subsequently, through lease/rent of sandalwood cutting rights in different hills, the colonial government earned a large amount of revenue. For instance, in a decade between 1862/63 to 1875/76, about Rs. 1, 47,537 was

realised from the sandalwood (Table 2). In other words, about one-fourth of total receipts of the Forest Department came from sandalwood in Salem and Baramahal region.

Coffee and Tea Plantations

Coffee and tea plantations were established in various hills of south India during the early nineteenth century, particularly between 1830s and 1850s. Coffee plantations were largely found in the highlands of the different districts of Madras Presidency viz., Vizagapatnam, Madurai, Tinnevely, Coimbatore, Nilgiris, Salem, Malabar and South Canara and Princely States viz., Cochin and Tiruvancore (Maclean 1885:290). Invariably the coffee cultivation started from the 1830s in different districts of the Madras Presidency. As of 1883, 17, 872 coffee plantations were established covering the area of 127,996 acres both in different parts of Madras Presidency and Princely States (Table 3). Besides the actual coffee planted area, large extents of forest were cleared for the coffee cultivation. Invariably the government has encouraged this cultivation by providing various forms of subsidies and concessions.

Table 3: Coffee cultivated Area in madras Presidency and Princely States in 1883.

Name of the District	No. of Coffee plantations	Cultivated Area (in acres)
Madras Presidency		
Vizagapatnam	9	6.5
Madurai	3355	5378
Tinneveli	51	2719
Coimbatore	16	1321
Nilgiris	459	35128
Salem	331	10769
Malabar	13568	52965
South Canara	10	72
Princely States		
Cochin	17	8251
Travancore	56	11386
Total	17872	127996

Maclean, C.D(1885), Manual of the Administration of the Madras Presidency, pp.403-04

Table 4: Trends of Coffee Export in Madras Presidency: 1855/56-1875/76

Year	Quantity (lbs)	Value (in Rupees)	Year	Quantity (lbs)	Value (in Rupees)
1855-56	8601464	892167	1866-67	34527695	7813813
1856-57	8869609	944446	1867-68	17374766	4191785
1857-58	7714355	867044	1868-69	35659638	8058373
1858-59	11372338	1230803	1869-70	47411508	10765221
1859-60	14578228	1875054	1870-71	37353359	8821118
1860-61	18571414	3241699	1871-72	35484209	8284862
1861-62	20960198	4710369	1872-73	56889888	13834164
1862-63	20269004	5355581	1873-74	41548950	11276542
1863-64	27333127	6555671	1874-75	41179712	15191418
1864-65	31424319	7684939	1875-76	36652965	13613617

Source: Maclean, C.D(1885), Manual of the Administration of the Madras Presidency, p.336.

A large extent of coffee products was exported to other countries and the quantity of export has been progressively increased in every year during the nineteenth century. For instance, in 1855/56, about 96 lakh lbs quantity worth of about Rs. 9 lakh was exported and it has been increased

respectively to 426 lakh lbs and 166 lbs lakh in 1875/76. On the whole, about 5538 lakh lbs of coffee worth of Rs.1352 lakhs exported during the two decades of the 1855-56 to 1875-76 (Table 4). In other words, the growth rate of export increased 326 per cent for the quantity and 1426 for the value between the periods of 1855/56 and 1875/76. Coffee was exported predominantly to the United Kingdom and France, besides Austria, Turkey, Egypt, United States of America, Arabia, Ceylone, Pergia, Victoria and foreign ports in India and other ports of the Indian sub-continent (Maclean 1883:336).

Unlike the coffee plantations, tea estates were found in Vizagapatanam, Madurai, Nilgiris and Malabar districts of Madras Presidency and Travancore princely States. In 1883, about 86 estates with 11,874.75 acres of tea estates and 26 estates with 1005 acres were found in Travancore States (Table 5).

Name of the District	No. of Tea plantations	Cultivated Area (in acres)
Madras Presidency		
Vizagapatanam	1	42
Madurai	2	3
Nigiris	78	11764
Malabar	5	66
Princely States		
Travancore	26	1006
Total	112	12881

Source: Maclean, C.D(1885), Manual of the Administration of the Madras Presidency, p.404.

These plantations are largely concentrated in the hill areas, where the tribal settlements existed. For example, in Tamil Nadu, coffee and tea plantations were established in the Shervaroy and the Nilgiris during the early nineteenth century. The planters encroached / alienated a large extent of tribal occupied lands and the common property resources. In addition to that they caused disturbances to the tribal traditional system (Saravanan 1999, 2004). In 1885, approximately 108,358 acres of land was under coffee plantations in the erstwhile Madras Presidency (Maclean 1885:290). The coffee and tea plantation was encouraged by the administration by providing concessions. The government gave concession i.e., exempted land rent for the first five-years and a meager land-rent of one rupee per acre per annum for the subsequent sixteen years of the lease period. In most of the cases, the tribals were harassed and badly disturbed by the planters mainly to grab their land (Saravanan 2004). Consequently, a sizeable number of tribals became landless and plantation labourers. In addition to that the government had imposed several restrictions on the tribals' rights over their lands and common property resources (Saravanan 1999:298-317). Hence, their earlier modes of production, which were directly related to the natural resources, got disturbed since the early nineteenth century. Tea was exported to other countries since early in the second half of the nineteenth century. Initially, a large quantity of the tea was exported. For instance, in 1855/56 about 43426 lb quantity of tea value of Rs. 34,376 was exported. However, after a year, the quantity of export has been dwindled down. In the decade between 1858-59 and 1868-69, tea export was completely neglected. However, the

export increased progressively in the subsequent period. Between 1869/70 and

Table 6: Trends of Tea Export in Madras Presidency:1855/56-1875/76

Year	Quantity (lbs)	Value (in Rupees)	Year	Quantity (lbs)	Value (in Rupees)
1855-56	43426	34376	1874-75	93918	114383
1856-57	79915	57461	1875-76	120924	146272
1857-58	13699	13699	1876-77	147132	166988
1858-59	53	70	1877-78	183178	193083
1869-70	6166	9162	1878-79	204630	211753
1870-71	17883	18065	1879-80	208247	233904
1871-72	33579	45594	1880-81	266942	286722
1872-73	43426	52417	1881-82	319752	372738
1873-74	80581	89166	1882-83	309548	329057

Source: Maclean, C.D(1885), Manual of the Administration of the Madras Presidency, p.346.

1882/83, about 2035906 lbs of quantity worth of Rs.2269304 was exported to other countries (Table 6). It clearly shows that the colonial administration has encouraged establishing the plantations in different hill regions, mainly for the export to the other countries and consequently destroyed a large extent of forests during the early nineteenth century.

Iron-Making and Sugar-boiling Industries:

As I have mentioned earlier, iron deposits are extensively found in south India. 'In Salem, the Northern Circars, ceded Districts, and Mysore, iron is found largely in the ore, while in Coimbatore and Malabar the black sand brought down by streams is rich in the metal' (SaradaRaju 1941:150). Until the colonial intervention, the traditional iron-making industries supplied agricultural implements, carpenter's and smith tools, and iron boilers for sugar making, domestic utensils and met many other requirements of the people (SaradaRaju 1941:151). These industries have employed workers varying from three to 10 and in some cases the numbers may be up to 20 (SaradaRaju 1941:155). These traditional iron-making industries, though spread over in different parts of the country mostly depended on the locally available fuel wood for burning charcoal mainly from their own villages.

After the colonial intervention, the colonial government encouraged the British iron-making industries and gave out some exclusive privileges during the early nineteenth century. Since the early nineteenth century, the colonial government emphasised the extraction of iron ore. In 1824, Thomas Munro observed that '... the richness of the ores of Salem and other districts have been known above thirty years, without anything having been done to extend their produce, and he suggested that the State has to extend the support for extracting the resources' (Arbuthnot 1886:561). In 1824, Mr.Heath, who is working in Madras Civil Service requested the Government for the exclusive right of iron-making in India and a lease of right of cutting the fuel in the Government wasteland (Brandis 1883:55). In fact, Munro and other members' recommended Mr. Heath proposal with the support of necessary facilities for establishing the iron-making industries. But the Court of Directors declined to accept the proposal (Brandis 1883: 55). After some years, the Court of Directors gave an exclusive privilege to

establish the iron-making industries in the Madras Presidency in 1830 (Brandis 1883: 55). He established the iron-making industries at Porto Nova in south Arcot district with the help of the government.

In 1833, Mr.Heath applied to the government for further financial assistance as well as other kinds of support. Considering the cost of production when compared with other countries, the government extended its support to this iron-making industry (SaradaRaju 1941:157). `Accordingly in 1833 Mr.Heath was granted exclusive mining rights in Salem, Coimbatore, South Arcot, Malabar and Canara and given permission to cut fuel in Tanjore, Tiruchinopoly and South Arcot with exemption from various duties for 21 years' (SaradaRaju 1941:157). In addition to this, the duty on Indian iron in England was reduced and as well all the materials required for the Porto Nova were allowed to pass duty free (SaradaRaju 1941:157). In 1853, the colonial government granted permission to the East India Iron Company for the exclusive right of getting ore from government waste lands in South Arcot, salem, Malabar, Canara and Coimbatore for 30 years on the payment of rent £500 per annum (Brandis 1883: 55). In addition to the native iron-smelting industries and British iron-making Company, the sugar-boiling industries in the different districts of the Madras Presidency consumed a large quantity of fuel-wood during the early colonial period (Saravanan 1998). It clearly indicates that the colonial government has encouraged the iron-making industries by extending all kinds of concessions leading to the decline of forest resources in the Madras Presidency during the early nineteenth century.

Railways

Since the introduction of railways in Madras Presidency in 1853, the length of railway track has been increased. In Madras Presidency, the first railway line between Veyasarpandy and Walajah Road (Arcot), 63 miles in length was opened on 1st July, 1856 by the Madras Railway Company. In 1856, the length of track has increased from 63 miles to 690 miles in 1866 and 1436 miles in 1877 (Table 7). In other words, the growth rate has increased over 2179 per cent within two decades.

Table 7: Expansion of Railway line in Madras:1856-1877

Year	Total Route (Miles)	Year	Total Route (Miles)
1856	63	1867	772
1857	65	1868	825
1858	81	1869	863
1859	96	1870	893
1860	137	1871	1018
1861	236	1872	1018
1862	312	1873	1022
1863	522	1874	1044
1864	527	1875	1172
1865	650	1876	1384
1866	690	1877	1436

Source: statistical abstract relating to British India (Various years)

A large quantity of forest resources were extracted due to the establishment of Madras Railways in the Madras Presidency during the latter part of the nineteenth century (Saravanan 1998). For example, in 1878, the agent of the Madras

Railways stated that the approximate requirement of wood for fuel was about 91,000 ton (Brandis 1883:40). Due to the laying of Madras Railways, a large number of valuable trees were cut down in the forest areas of different districts of Madras Presidency. For example, in 1859-60 about 245,743 berths were supplied from Salem and Baramahal region alone (Richards, 1918:248). In addition to the berths, a large quantity of wood was purchased for the fuel by the Madras Railways. About 354,921 tons of wood was purchased and about 801,504,650 lbs or 357,017.66 tons of wood was consumed exclusive of small wood for lightings during the period of five years, 1873- 1877 (Table 8). Further, conservation of forest was initiated in different districts of Madras Presidency to meet the future fuel-supply to the Madras Railways. In short, large quantities of forest resources were extracted for the Railways in different parts of the Madras Presidency during the second quarter of the nineteenth century.

Reserve Forest Prior to the Forest Act

A large extent of forest area was brought under the reserve forest prior to the Madras Forest Act 1882, not aiming at a conservation point of view but to ensure the future commercial

Table 9: Aren under the Reserve in Madras Presidency prior to the Madras Forest Act:1867-1881

District	Year of Notification	Estimated areas in Acres
Godavari	1880	43520
Cuddappah	1870-1881	113286
North Arcot	1871-1879	14381
South Arcot	1869-1880	95757
Tiruchinopoly	1871	4166
Madurai	1878-1881	150675
Tinnevelly	1881	183558
Coimbatore	1879	92941
Nilgiris	1878-1880	18074
Salem	1867-1880	11398
Malabar	1872-74	28806

Brandis, Dietrich (1883), Suggestions regarding Forest Administration in the Madras Presidency, Madras, p.16. motives (Saravanan 2003). Since 1867, tracts of forests were brought under the reserve forest. Between 1867 and 1881, about 756562 acres of forests were brought under the reserve by the colonial administration either through the Government Order or by the Board of Revenue (See Table 9).

Revenue from the Forest

Since the early nineteenth century, the Forest Department extracted a sizeable amount of revenue from the forests either through selling forest resources directly or leasing out the rights of collection of forest produce in different parts of the Madras Presidency. However, there is no evidence of a separate account for it during the early nineteenth century. But the available data clearly indicates that the revenue from the forest was not a negligible amount. In 1868, about £42966 worth of revenue was collected from the forest resources. Between 1968 and 1877, about £415258 was collected from the forest in Madras Presidency (Table 10). This may be attributed

Table 10: Amount of Forest revenue collected from Madras Presidency:1868-1877

Year	Forest Revenue (in £)	Forest Revenue (in Rupees)*
1868	42966	429660
1869	39133	391330
1870	49855	498550
1871	33979	339790
1872	41886	418860
1873	41854	418540
1874	44983	449830
1875	36354	363540
1876	42772	427720
1877	41476	414760

* One £ = 10 Rupees.

Source: Statistical abstract relating to British India from 1867/8 to 1876/7.

to commercialization of forest resources at the time when conservation was gaining emphasis in Madras Presidency. In other words, if the tribals made use of the forest resources for their livelihood it was caricatured as destruction by the state and in turn they do the similar thing it is portrayed as protection and development activities. Since the early nineteenth century, the different kinds of forest resources were extracted for the commercial purposes. In fact to extract these resources different kinds of incentives were provided in different points of time. This kind of mean exploitation of the forest resources commercially has certainly made an impact on the environment and tribals which we can see in the subsequent section.

IV Consequences of the forest policy on the Environment and forest-dwellers As elucidated earlier, forest resources in the hill tracts were never exploited for commercial purposes by the tribal people and the others made judicious use of them for their requirements, ensuring their sustainability until the colonial intervention. [During the pre-British period] However, scholars generally agree that the scale of the logging was too small to cause any widespread ecological damage' (Chaudhury 2004:95). In this section, let us see the commercial exploitation of forest resources and what kind of impact it has made on the environment and livelihood of the tribals and other people during the early nineteenth century.

3. Conclusion

We have understood from the preceding chapter the dual motive behind the creation of forest reserves as timber supply to the urban industrial sectors and raising revenue for the state. The forest were organised scientifically as a profit maximising enterprise. As the Forest Department was a part of the Government establishment its expenditures had to be sanctioned at the highest level subject to financial rules. Success of the department and efficiency in its management was measured in terms of increase in revenue and consequent surplus over expenditure. It was obligatory on the part of the Conservator of forests to draw progress report on their charge annually, which was sent to the government for perusal and approval.

1) measure of weight prevailed in Madras Presidency. One mound is equal to 25 lbs in the Madras Presidency.

- 2) One Star Pagoda was equal to 45 fanams or 3600 cash. One Star Pagoda is equal to three and half Company Rupees.
- 3) A money measurement, eighty cash equal to one fanam; Forty-five fanams equal to one Star Pagoda.
- 4) It was a lowest money measurement. Eighty cash is equal one fanam and 45 fanams equal to one Star Pagoda.
- 5) Letter from BOR to the Collector of Salem, 6 Jul.1801.
- 6) A dry grain measurement. One candies is equal to 40 bullas or puddies or 7,248 cubical inches.
- 7) BOR, Vol.258, Jul.1800, p.6642, TNSA.
- 8) BOR, Vol.1587, 11 Dec.1837, p.1504, TNSA.
- 9) Letter from BOR to the Collector of Salem, 6 Jul.1801.
- 10) A dry grains measurement. One candies is equal to 40 bullas or puddies or 7,248 cubical inches.
- 11) BOR, Vol.258, Jul.1800, p.6642, TNSA.
- 12) BOR, Vol.1587, 11 Dec.1837, p.1504, TNSA.
- 13) Letter from Colonel R.H.Beddome, Conservator of Forests to J.H.Garstin, Acting Secretary to Government, revenue Department, dated 22 December 1876, TNSA.
- 14) Letter from Colonel R.H.Beddome, Conservator of Forests to J.H.Garstin, Acting Secretary to Government, revenue Department, dated 22 December 1876, TNSA.
- 15) To collect the revenue directly from the cultivators by the officers of the Government upon the removal or suspension of an intermediate claimant.
- 16) In times prior to colonial rule the whole of the Pariah community, without exception, were the slaves of the superior castes' (Census of India 1871: 169).
- 17) BOR, Vol.1537, 10 November 1826, pp.18133-36

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