#### FOREST CLEARANCE

The early British mistreatment of Indian forests reinforced the claim that the British race was rapidly converting forests into deserts. By 1860 Britain became the world leader in deforestation, devastating its own forests and forests in Ireland, South America, north east USA for farming, iron smelting and shipbuilding.

## The motives behind the British drive to clear forests in India:

- 1. To increase revenue by extension of agriculture which was a prime and consistent source of revenue
- 2. To increase political control by increasing land under settled cultivation which was easier to administer than forests and wastelands
- 3. To meet increase in demand for timber for shipbuilding which was accentuated by (a) the Anglo-French naval rivalry (b) shortage of timber in Britain (c) Baltic timber supply stopped because of strategic isolation of Britain during the revolutionary and Napoleanic wars between 1793 and 1815 and the neutrality of the Baltic countries during the blockade.
- 4. To meet increase in demand for timber for building dockyards, barracks, ordnance factories, and later and most importantly railway construction.
- 5. To meet increase in demand for fuel for steamships, townships and later railways
- 6. To reduce the hideouts of disorderly social groups and revenue fugitives.

  Forests were the abode for tribals who were considered to be primitive and prone to violence. And peasants from the settled cultivated areas who

- were unable to bear the revenue demands of the state took refuge in the forests.
- 7. To honour the negative view of woodlands that the British carried into India from Britain. Forests were considered by the British to have lapsed into a state of nature because of inadequate human care. The British believed that forests were meant to be tamed by clearing them for cultivation.

# Policies adopted by the British for clearance of forests:

Revenue demand was increased which forced cultivators to extend the land under cultivation by clearing forests and wastelands and bringing those lands under cultivation. Sometimes it had the opposite effect when revenue demands were too high - then cultivation was avoided by escapism.

Military campaigns were used to subdue belligerent forests users who resisted the clearance of forests. The Pahari tribals of the Rajmahal hills were subdued by military action in 1772-78 and Santhals brought in because they were good workers and generated more revenue.

A Baze Zamin Daftar (Wasteland Office) was created in Bengal to give priority to clearing wasteland for cultivation.

Baze Zamin Regulations were instituted in 1788. The provisions included restriction of zamindars from giving rent-free land grants - in normal times this was beneficial but in times of famine it had the opposite effect of retarding agricultural recovery after famine conditions.

#### FOREST CONSERVATION

From the late eighteenth century western scientists had begun to explore the links between deforestation, desiccation and drought. The rapid clearance of forests, due to agricultural colonization and industrial development, contributed to accelerated soil erosion, decline in rainfall, scarcity of wood products and the steep rise in their prices. Foresters led the scientific movement which was held together by a set of beliefs that was remarkably invariant across the continents and across the different sectors (like forest, soil, water, wildlife and fisheries management) in which it was applied. Scientific conservation was an ideology of doom and resurrection, predicting that agricultural and industrial expansion would destroy the environment unless replaced forthwith by more rational and far-seeing forms of resource use. The apocalyptic and redemptive ideology did not hark back to an imagined past but looked to reshape the present with the aid of reason and science. The profit motive was incompatible with conservation because individuals and corporations were notoriously short-sighted. The state had to assume the responsibility of managing resources such as forests and water.

#### The motives behind the British drive to conserve India's forests:

The prime motive of forest conservation in Indian was to reverse the threat of shortage of timber for shipbuilding and railway construction and fuel which the British apprehended was imminent. Initially forests were cleared for agriculture and then shipbuilding and steamship fuel. In 1853 it intensified because of the introduction of railways which required wooden sleepers for its tracks and wood for fuel until the coal mines of Raniganj became operational. In the Madras Presidency alone 2,50,000 sleepers or 35,000 trees were required annually. The crisis became major because initially only teak, sal and deodar timbers were found to be strong enough for railways (in 1912, years of research on treatment of wood enabled the use of chir and blue pines as railway sleepers on a commercial scale). Teak and sal were cut from peninsular India and deodar from the Sutlej and Yamuna valleys in the north.

The pace of railway expansion revealed that India's forests were not inexhaustible.

Another motive was to allay the colonial fear that environmental imbalances perpetrated by deforestation could cause drought and silting of rivers which could jeopardize agrarian prosperity and social stability. Surgeons of the East India Company initiated this concern and pitted the stability of the Company state against the short-term interests of those who cleared the woodlands.

There was an increase in the commercial value of forest products which would serve the empire better if perpetuated.

The Government of India Resolution No.22F dated 19-10-1894 stated that the sole objective of forest administration was to promote the general well-being of the country, primarily for the preservation of the climatic and physical conditions of the country and secondly to full fill the needs of the people subject to the conditions that permanent cultivation should come before forestry and that the needs of the local population should be satisfied free or at non-competitive rates.

## Policies of forest conservation adopted by the British rulers:

A restriction was first imposed on the felling of teak less than 21 inches in girth on the basis of the report of a Commission was set up in South India in 1800 to assess the availability of teak in the Malabar forests.

The Government declared the right to levy a royalty on teak and prohibit the unauthorized felling of teak on the basis of the assessment of forest resources and proprietary rights in forests by the Forest Committee constituted in 1805.

The <u>first Conservator of forests</u>, <u>Captain Watson</u>, <u>was appointed in 1806</u> to organize production of teak and other timber for the navy. But the post was abolished in 1823.

The first teak plantation was established in 1842 in Nilambur by Conolly the Collector of Malabar.

Kumri, or shifting cultivation, blamed for accentuating deforestation, soil exhaustion and low agricultural productivity was banned in Coorg (1848) and Belgaum (1856).

A 'Charter of Indian Forests' was issued by Lord Dalhousie in 1855 outlining the objectives and principles of forest conservancy. It was based on the report of McLelland, then Superintendent of Forests, Burma.

The <u>first regular conservator of forests was Leghorn</u>, a medical officer, appointed in 1856 in the Madras Presidency.

The British then turned to and adopted the German model of scientific and systematized forestry. The ascendancy of German forest science was a consequence of the quantitative methods developed there to estimate growing stock and yield - from a simplistic area-based approach to a complex but more reliable yield-based system that assessed volume and weight of trees of different ages, growth patterns, soil and moisture conditions and provided fairly accurate yield tables. The model had previously been successfully adopted by France, Prussia and Bavaria also. The objective was to optimize the foresters' effort of assessing and harvesting the forests and annuitizing the yield of the forest so that a steady output of timber is possible over the years without wasteful labour.

<u>Dietrich Brandis</u>, a German, was appointed as Inspector General of Forests to set up and administer the Forest Department. He tried to initiate a system of conservation and management of Indian forests through reservation of forests

and progressive withdrawal of proprietary rights. He also initiated measures to set up trained forest officers throughout India. He later authored the most important reference book for Indian foresters "Indian Forestry". Two more Germans, Wilhelm Schlich and Bertold von Ribbentrop followed him. So the Indian Forest Department was guided by Germans for half a century.

The <u>All-India based Forest Department was created in 1864</u> to ensure a steady supply of timber for railway construction. The Forest Department came to own one-fifth of the land in the subcontinent and became one of the largest forestry enterprises in the world.

The <u>first countrywide legislative step towards the rule of property for forests in British India</u> was taken in 1865 by the institution of the <u>Forest Act of 1865</u>. Local state governments were empowered to draft their own rules to enforce the Act. It provided for only a limited degree of state intrusion and control. The 1865 act was hurriedly drafted and passed to establish the claims of the state over forests required for railway supplies, subject to the proviso that existing rights would not be abridged.

Almost immediately there began a search for a more stringent and inclusive piece of legislation. State control was considered but there was no unanimity of opinion among officials about the extent of state control that should be introduced - Baden Powell led the group that recommended extensive government control; Thomas Munro was strident voice among those who recommended minimal control; other officials including Dietrich Brandis, the Inspector General of Forests preferred limited state intervention to monopoly by state or a completely free market.

The <u>Forest Act of 1878</u> was designed to remove defects and inadequacies of the Act of 1865. The Act focussed on removing the ambiguity about the "absolute property right of the state" because villagers had become accustomed to graze cattle and cut wood wherever they wished, even in states

where the state retained absolute proprietorship. It provided for the constitution of reserved and protected forests. It provided more extensive powers for officials. It did not yet apply to Madras, Coorg, Burma, Bihar and Hissar (in Punjab). The Madras government resisted until the passage of a separate Forest Act in 1882. Separate Acts were also passed in Burma (1881) and Berar (1882).

A more absolute nature of property (as a hierarchy of user rights) was applied than in the past: Grazing, illegal tree-felling and cultivation, and forest fires were curbed to enhance reproduction of valuable species. In some areas in Punjab even access was regulated. No rights could be acquired in reserved forests unless explicitly ceded by the Provincial Government under the Act. In protected forests rights were recorded but not settled. (In permanently settled areas like Bengal and Benares, the Zamindar owned the wastelands. In ryotwari areas like Madras the government owned all the wasteland).

## A forest school was established at Dehra Dun in 1878.

A <u>Provincial Forest Service was set up in 1891</u> to recruit and develop a cadre of forest officers.

But from the outset the Government of India appeared to have been mindful of the need to reconcile the requirements of sound forest management with the traditional rights of the rural people and their changing needs. The British were fully conscious of the seeds of future conflicts with tribals and villagers as a consequence of bringing forests under public administration.

The <u>Government of India Resolution No.22F dated 19-10-1894</u> redefined and reiterated the central objectives of forest policy.

The needs of scientific forestry were to be subordinated to the preservation of existing rights and customs of tribals and the promotion of their well being.

Forests were classified into four categories: (i) forests whose preservation was essential on climatic or physical grounds; (ii) forests which provided valuable timber for commercial purposes; (iii) minor forests; and (iv) pasture lands.

Forests on hill slopes were considered to be in the first category because they were necessary to preserve to prevent erosion on the hills and the consequent destruction of soils below.

Needs of local people were to be satisfied at concessional rates, if not free, from the second category of forests of valuable commercial timber like teak, sal and deodar.

Minor forests of inferior timber were to be managed mainly in the interests of the local population preserving the wood and grass from destruction. All considerations of revenue were to be secondary.

The principles enunciated for the grant of privileges to local people in minor forests would apply mutadis mutandis to pasture lands because it was found that local people had acquired maximum usage rights in these.

Forest areas were to be relinquished if there was an effective demand for cultivation, provided (i) the cultivation was permanent and not shifting, (ii) forests were not being honeycombed with patches of cultivated land, and (iii) cultivation was not encroaching on the minimum forest requirements of the country.

Forest administration after 1894 continued to reduce the customary rights of the local people because (i) forest regulations were extended over ever widening areas of forests (ii) there was a bias in favour of conservation and against the interests of the local population, and (iii) compulsions were imposed by the five year plans for the maximization of revenue.

The <u>Indian Forest Act of 1927</u> classified the forests in three categories: (i) Reserved Forests; (ii) Protected Forests; and (iii) Village Forests.

Reserved forests consisted of compact and valuable areas well connected to towns for sustained exploitation. Total state control was safeguarded by a permanent settlement, which extinguished, transferred or limited private rights. The administration of reserved forests was contingent upon imperial interests like the railways and the two world wars.

Protected forests carried rights that were recorded but not settled. There were detailed provisions for the reservation of particular tree species and for the closing of the forests to grazing and firewood collection when required. Protected forests were gradually converted to reserved forests because of increased demand for wood. [1878 - 14000 square miles of state forests; 1890 - 56000 sq mi of Reserved Forests (RF) & 20000 sq mi of Protected Forests (PF); 1900 - 81400 sq mi of RF & 3300 sq mi of PF].

The Village Forests option was not exercised by the government over mosts parts of India.

Forest Settlement Officers were appointed to adjudicate on rights and privileges claimed by people in reserved forests.

The Government would pass final orders permitting or prohibiting shifting cultivation on the basis of inquiries and recommendation of the Forest Settlement Officers.

There was a constant search for markets for the multiple species of India's tropical forests because the Forest Department had to generate an adequate revenue as per the cardinal principle of imperial policy that the administrative machinery had to be self-sufficient