

# Contours of Green Imperialism in Colonial India

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**Abstract**—*Being colonized for almost two centuries India had faced exploitation at various levels. Initially under the East India Company and then under the British crown, the resources of the nation were extracted and utilized for the benefit of Britain. Extraction of commercial resources was directly linked with the political and military goals of the government. It impacted environmental milieu of the country in diverse ways. Policies like Permanent settlement changed the ownership of the natural resources, emphasis on commercial crops raised the problems of land fertility whereas increasing military capabilities demanded clearance of dense forests for either making roads or for security purposes. Extensive nature surveys were conducted and forest departments were formed in all presidencies that advanced the British commercial exploitation of India's forests and land. As the British rule was functioning on the sole purpose of earning profit, appropriation of forest became a common pattern. This process severely impacted the relations of tribes, forest dwellers and villagers with their jungles. As a consequence, in various regions of India tribal movements emerged that were brutally suppressed by the British.*

*The paper delves into the various aspects of policies and action taken by British rulers in the name of conservation of nature and development. It critically analyses the impact of the same at the ground level. It states that exploitation of natural resources in colonial period was a result of rapacious British attitude to make India a more profitable colony that turned out to be a major challenge of Independent India.*

**Keyword:** *Imperialism, Exploitation, Tribal Movement, Forest.*

## 1. INTRODUCTION

Colonialism supported the advent of western economic forces that promoted a rapid ecological transformation in many parts of the world. Modern India also witnessed such changes. Arrival of European companies in India was initially of a trading venture. Presence of different trading companies from different countries led to competition and finally British East India Company (EIC) emerged as the strongest among them all. It not only defeated other European companies but also the regional political powers of India. It was the final battle of Buxar (1764) in Bengal that further gave political control to one of the richest areas of India to company. Gradually different political powers in India succumbed to company except a number of princely states, which were indirectly controlled by British. And a new phase in Indian history begun in which British emerged as the new rulers. This increasing political hold on the country was challenged by Indians during the revolt of 1857 and consequently, the rule of East India Company ended and India fell under the direct control of British crown. The British rule brought many changes in different spheres whether political, economic or social.

Colonial state (whether under the EIC or Crown) was driven by the principle of profit. Hence, the motive of fulfilling imperial interests impacted the status of natural resources and environment. Ironically, colonial state on one hand provided conducive environment to conserve nature and diffused new scientific ideas promoting the analytical thinking and conservation towards environment [2]. But it also controlled the natural resources for its own profit. It would be incorrect to say that in the pre-British era environment changes did not take place. But with the use of technology resources were exploited on a larger scale in the colonial era. This paper delves into the process of transformation of natural resources and environment of India in the British period. It is divided into two parts. First the conservationist role of British government is discussed and the second part explores the ulterior motives of the Raj especially the military, political and commercial goals.

## 2. CONSERVATIONIST ROLE OF COLONIAL STATE

In Britain, a lobby of environmentalists was active from the 18<sup>th</sup> century onward that supported the notion that British are responsible for the conservation of nature in their colonies [2]. This notion also matched the needs of the newly establishing colonial state. The process of conservation in India started under the company rule itself. Company rule faced many challenges such as frequent famines and diseases. Famines were exacerbated with the exploitative revenue and agricultural policies of the company [10]. Worsening the situation were the extreme exploitation of the natural sources given the constant wars that company was indulged with. All these factors created the fear of political instability and thus policies were adopted to take significant steps that can conserve nature and also can help in curbing the problems of famines and diseases [1]. Keeping all these concerns in mind a process to establish the Botanical gardens was started. From 1778 onwards in all three presidencies Botanical gardens were formed. The most significant garden was in Calcutta that extensively experimented with many plants. The focus was kept on improving commercial production of certain fruits and crops [12]. For instance, apples, breadfruit, coffee, cotton, mulberry, silk, sugarcane, tea, teak, other valuable timber, and drought-resistant plants [2].

Besides Botanical gardens one more step was taken by the company rule that was to conduct extensive surveys. These surveys helped in comprehend the territory better and

additionally developed a deeper understanding of natural risks. The process of survey obviously was not free of racial discrimination. A hierarchy existed where projects were mainly led by British surveyors, whereas Indians worked as assistants. Through these surveys all land of the country began to be measured [2]. Initial surveys started with Bengal which was very early taken control of by EIC. The contribution of Francis Buchanan and Major James Rennell was remarkable who not only collected large data about the sources of Bengal but also created detailed map of the province in the early 19<sup>th</sup> century [13]. Later on, such maps both physical and political were also prepared for the rest of country. These maps certainly helped in demarcating political and administrative boundaries. The movement of military could also be prepared more precisely afterwards. One of the largest survey projects was 'Great Trigonometrical Survey project' that was begun by William Lambton and completed in 1843 by Sir George Everest. Under this project theodolites were used and Indian subcontinent was precisely mapped [14]. During the survey, it was recorded that in some areas, Indians protested against cutting of trees (in order to get clear line of sight) [1]. With the implementation of different revenue systems, the process of mapping each village field was also started that produced detailed information.

Global environmentalism in the late 18<sup>th</sup> century gave birth to the formation of various scientific societies all over Europe. Research publications were made available in the colonies as well and colonial state focused on making policies to conserve the fauna of the country as well [2]. Forest departments were opened in different presidencies. It was in 1847 when under the conservator Gibson, forest department was formed in Bombay. With the formation of forest departments was started the policy of protection. Certain species of flora and fauns were identified as 'protected' especially the ones which were commercially profitable [7]. As a result, certain animals and mainly commercial crops were saved whereas many other species declined. The forest officials took help of locals to conduct their activities sometimes the cases of Begar were also registered [1].

These early actions taken by the company in the name of environment conservation had the ulterior motive of fulfilling the commercial needs of EIC. Mapping the subcontinent helped in the process of conquering and controlling the far away territories. Newly established concepts such as Botanical gardens and forest departments were selective in conserving and improving the status of certain species. Scope of these conservation policies of the Raj was very limited. The new economic patterns and policies had destroyed the natural resources. It in a way subordinated Indian environment and Indians as well. One such example can be taken of the Permanent Settlement system. It was introduced by Lord Cornwallis in 1793 in Bengal. This revenue system changed the ownership rights of land. It was the landlords who were given these rights instead of peasants [10]. These ownership rights not only included the land but also riverfronts, enclosed bodies of water, fish, animals, plants, and minerals [2]. The

Zamindars who had to pay a fix amount of revenue at a fix date. They worked with the sole motive of extracting more and more money from the allotted land and hence, a process of extreme exploitation started. And directly or indirectly natural resources of the country were depleted as hardly any measures were taken to improve or conserve them by the Zamindars.

The greed of company to turn itself more profitable resulted into the adoption of commercial crops. In order to create large lands for commercial crops clearing forests became a necessity. Many British planters took this opportunity as land rules were very liberal [3]. They bought land from EIC at very low prices. It started when the act of 1833 ended the monopoly of EIC over trade from China. Thus, as an alternative, experiments with tea were started in the Assam where the climate and topography were ideal for Tea plantations. With the increasing demand of Indian tea in the British market, area of tea gardens also increased. In 1880, Tea gardens covered 154,000 acres and by 1900 the area expanded to 337,000 acres [3]. From 1830s onwards that coffee plantations in western ghats also developed in large numbers. It was the area of uplands of Mysore, Coorg, Travancore and Wynaad where many Europeans owned the coffee plantations which were mainly the hilly areas earlier occupied by many tribals. Thus, traditional systems were intruded and tribals turned into landless or plantation labourers [7]. In both the cases initially establishing plantations was a very difficult task. Firstly, forests were to be cleared on a large scale. And secondly, supply of products from plantations to port cities also needed better means of transport (railways) requiring clearance of forests. In case of Tea chest large quantity of timber was also required that further led to deforestation in the surrounding areas [4]. Ecological costs were never considered while developing these plantations.

Pattern of early conservatism can be better understood through the example of Timber. Timber was an essential but expensive commodity for the company. Development of urban areas or the ship industry, it was high in demand. With the extermination of oak trees in Britain, for the need of Royal Navy, timber was highly required and Indian teak proved to be of good quality [8]. This demand emerged as a crucial factor behind the forest policy of EIC. Besides this, for domestic needs as well, Indian teak was of high significance due to its durability [8]. In the early phase when EIC was indulged in constant wars with the Indian states and other Europeans companies, for the military purposes, timber was highly required and thus it became one of the factors behind the military adventurism and plans [2]. Control over forest resources and territorial expansion had direct connection. Company's expansion northwards and eastwards to the Nepal border and into the Maratha territories on the west coast was much encouraged by the threat of a timber shortage [2]. The discord between Governor general of Calcutta and Bombay authorities over the territorial expansion was seen many times. Warren Hastings (Governor-General of India, 1774–1785) criticized the involvement of Bombay authorities in the Maratha wars when control of particular forest areas was the

only reason given by Bombay for interventions unlicensed by the governor-general in Calcutta [2]. In the southern regions problem of timber was solved after the third Anglo-Mysore war (1790-92) in which Tipu Sultan was defeated and killed. Company got access to the forests of Malabar and Mysore. Once this large area was controlled, the demand of timber for ship building was fulfilled. In the large amount teak was supplied. Ship industry boosted and in 1805, the EIC Court of Directors set up a Forest Committee to consider how far the Navy could depend on its newly acquired supplies of Malabar teak, now highly valued as a raw material for building ships of the line [1-2]. In 1807 company even appointed 'Conservator of Forests' to ensure the supply, protection and improvement of timber for ship building, it was later ended amidst the protests of merchants [7]. Soon in the areas of Malabar and Travancore company established timber monopoly [7]. This booming ship industry diminished teak and many other species in the presidency. The acquired control over timber and natural resources provided various benefits to company. Besides its commercial uses it facilitated the control over unruly tribal groups. These policies of the company led to many violent resistant movements but were controlled through repressive measures with the help of police and army forces [2]. Marias of Bastar were first to protest against the forest laws that not only prohibited their local cultivation pattern but also limited their rights over forest produce in the early 20<sup>th</sup> century [6].

Environmental effects of such extraction of natural resources were summed up in a report that was presented in 1852. This report was titled as 'Report of a Committee Appointed by the British Association to Consider the Probable Effects in an Economic and Physical Point of View of the Destruction of Tropical Forests'. This report raised concerns over the depletion of tropical forests in India [2]. Problem of deforestation was further linked with erosion, aridity, irregular monsoon rain patterns and human diseases. It stated that due to cutting of trees, problem of deforestation is arising leading to soil erosion on the Malabar coast. Soil erosion further created the problems of siltation of commercial harbours. In this background the report demanded the requirement of conservation programme.

### **3. BRITISH CROWN: DEVELOPMENT VERSES ENVIRONMENT**

The revolt of 1857 could not be successful, though, it changed the nature of foreign rule in India. With the implementation of the Act of 1858, India was taken under the direct control of British crown. Broadly, with this act, expansionist attitude of EIC was left behind as it was declared that no more Indian provinces would be annexed in British India. However, indirectly British control and exploitation of Indian natural resources continued. Under the colonial state, many projects in the name of development were started. Number of Public Works Department (PWD), Forest departments and the revenue departments increased. These departments were racially segregated. Under their hierarchical structures European elites

enjoyed the top positions whereas Indians worked as subordinate officers, staff, and daily waged workers.

In 1864 the first forest department was established by Sir Dietrick Bandis. It was formed to fulfil the long-term imperial interests of the Raj as the unsupervised felling of trees for railways purposes concerned many officials about the depletion of timber [8]. The department worked on two principles, one to conserve the specific trees that have commercial purposes and second to ban the rights of forest communities to utilize the resources or forest land [4]. In order to control the forests, the area was divided into Reserve, protected and district forests, where in reserve forests everything was restricted. In protected areas more rights were given to the natives. Shifting cultivation was restricted and discouraged that paved way for the exploitation of forest land for commercial purposes [7]. The period of colonial rule under Crown introduced many forests conservation acts that further tightened the grip of Raj. These acts became a highly convenient form of social control and oppressed indigenous people. Government forest departments kept on changing the rules about accessibility of natives over the forest produces. The Forest Act of 1865 and later on the act of 1878 were the initial attempts to showcase state power and ownership [2-9]. The 1878 Forest Act expanded the 1865 Act's definition of "forest produce" to include valued animals and their parts (including skins, horns, and tusks). Both the central government and many provinces passed acts claiming authority over wildlife generally or specific species like elephants. The Forest Department's 1891 Regulation and 1894 Forest Policy for the whole of British India reclassified customary forest-access rights into government granted "privilege," for which foresters charged fees and could unilaterally deny [1-2]. And, with these acts started a new phase of oppression of indigenous people of the country. The Raj established the Imperial Forest Service to provide wood in large measure for railways and other parts of India's and the empire's expanding economies. In 1863, the government officially declared that "the proper growth and preservation of the Forests is as important as agriculture [1].

Indian wildlife also suffered from the effects of new military-developed technology in the form of higher-powered and more accurately sighted rifles. Availability of such weapons increased the killing rates of animals. Several legislations ended the hunting rights of the common population; only British were allowed to possess firearms. This exclusive right to hunting to the British gave them more power and control over the forest areas as well as forest dwelling communities [5]. One of the popular hunters was Edward James also known as Jim Corbett. In the second half of nineteenth century policies were opted to conserve big-game species so that the privileges of hunting could be continued [5]. Number of Cheetahs dropped soon by the trophy hunters. It was the 20<sup>th</sup> century that witnessed a new wave of conservationists; British and many Indian Elites. From hunting focus shifted to wildlife conservation. An All-India Conference for the Preservation of Wild Life in 1935 was held in which creation of national parks

was considered a priority. The first of such park Hailey National Park was created in 1936 that was later named as Corbett national park.

To understand the colonial attitude towards conservation, examining the development of railways in India is crucial. The development of railways and other services invited many private British joint-stock companies that contracted many projects and worked for their own profit. Initially railway construction was given in private hands however routes were specified by government considering the commercial interests of the Raj [9]. Railway projects were kept under government supervision in return guaranteed 5% profit was given to private companies. Later on, PWD were also given the projects and a hybrid public-private partnership also existed [9]. Railway lines that covered a large territory of the country not only helped in military needs and famine relief but also provided profit through revenue and other commercial enhancement. Spreading railways needed huge volumes of woods that government foresters had to provide. A large number of Indian hardwood trees, especially teak, sal (*Shorea robusta*), and deodar (*Cedrus deodara*) was used for sleepers [2]. Each kilometer of railway track initially used about 1,000 sleepers, about 200 large trees. Many hardwood forests have never recovered [2]. The tree cutting was without any supervision and in many cases large number of cut trees could not be utilized [8]. For fuel also, Indian forests were exploited. Before the proper functioning of coal mines in central India, it was local timber that was used for the fuel [8]. Ironically, in the Madras presidency conservation of certain forests areas was started to ensure the future fuel supply for the railways [7]. All this caused major deforestation, in addition to expanding commercial timbering that was made profitable by railway transportation. No need to mention that railways were fulfilling the military and commercial interests of Raj.

Another large project in the name of development was irrigation. Network of canals was developed in certain areas. With the development of canals enhanced the productivity of farmland and also increased the arable land area [7]. In the Punjab areas, many canal projects were started that increased production. More and more production further provided large amount of revenue for the government. And given the simultaneous development of railways, products could easily be transported to Britain. However, it had a negative impact on the environment. The unlined canals gave birth to the problem of seepage [1]. These areas later faced the issues of salinization, raising water tables and often disrupted the groundwater flows. Engineers even planned canal colonies in Punjab [9]. It disrupted existing seasonal crop system. Irrigation system was more beneficial for the cash crops such as cotton, indigo, and sugarcane [1]. The ecological, economic, and social changes benefited wealthier exporting farmers and damaged to the environment and many flora and fauna species.

#### 4. CONCLUSION

It can be said that policies of the Raj altered the natural environment of the country. These environmental policies were product of tensions between the insecure and rapacious colonial state and of the emerging climatic environmentalism. The motive behind the policies was to gain more and more commercial profits. Natural resources were exploited and conservation programmes were started to fulfil the future needs of colonial state. Under the new conservation agenda of the government, indigenous forest communities were banned from using the forest resources. Railway, forest departments, and irrigation departments transformed the economy of colonial India, but mainly benefited Britain. These profit-centric policies caused major ecological damage in India and distorted the Indian economy and society.

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