# THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

# Implementation of Scientific Forestry and Consequent Promulgation of First Forest Act of 1865 in India

# Priyanka Guha Roy

Research Scholar, Jadavpur University, Kolkata

#### Abstract:

Forest encirclements had always been the dominant feature of any moving economy in any administrative structure but for colonial phase of British India it had been characterized by disallowing the forest dewellers to have any claim on the fruits of nature. It meant a total negation of rights of people being dependent on forests. This encirclement was no doubt done by the forest act of 1865 and later on the implementation of the act 1878 laid the basis of a fine engulfing of forest products by colonial forest authorities. Science was very well used as an apparatus to achieve a compact scientific conservation through the application of scientific methods but scientific forestry achieved the custodial approach of strengthening state control and denied the customary rights of the user exercised by peasant and tribal authorities. The creation of strictly protected government reserves denied access to these resources. The promulgation of the first forest act of 1865 and subsequent acts outlined such denial in a more regressed manner.

**Keywords:** Forest, Science, Acts, Forest dewellers

#### 1. Introduction

The most fundamental of all human societies is their continual interaction with their natural environment. The global history of humanity rests genuinely on these diverse modes of human societal interaction within a large ecological setting. This human–ecological interaction articulates concrete environmental policies which is nothing other than scientific study of the natural world. The exploration by European travelers of Asia and America kindled a keen interest in the richness and diversity of nature. The exuberance of plant life in the tropics was documented by a whole array of European scientists, of whom the English man Charles Darwin (1809-82) is perhaps the best known and most influential(Guha2000:3)

However, Ibn Khaldun in his fourteenth century treatise "The Muqaddimah" delineated important ecological dimensions to the patterns of social development(Guha:ibid.series editor's preface by Michael Adas:vii). George Perkins Marsh's "Man and Nature" another important work published nearly a century and a half ago. But it is only since the 1960s, the world and cross-cultural historians, led by William H.Mc Neill, Alfred Crosby and more recently John Mc Neill, have embarked on sustained and thoroughly documented explorations of the diverse patterns of social and environmental interaction over time. Similarly Clarence Glackens's work "Traces on the Rhodian Shore" traces human response to the environment from ancient times to the modern era. However the work is inclined towards European thinkers and civilizations and to the ancient Mediterranean milieu(ibid:viii).

#### 2. Scientific Forestry and Transformation of Forest Policy

Scientific forestry in India began with German Botanist Dietrich Brandis, employed by the Government of British India to head a newly created, countrywide, Forest service. This man shared a deep concern with the pace of scientific expertise to reserve it. The Indian forest department, which Brandis headed for close on two decades, had been one of the most influential institution in the history of conservation (ibid: 26)

The implementation of scientific forestry was quite often at odds with its professed aims and supposed achievements. In India however it followed a custodial approach, with the strengthening of state control which supported the denial communities. The exercise of state control over forests meant denial of easy access which B. Ribbentrop(1900:37,61) pointed out that the "Scientific forestry" under imperial aegis marked the end of a "war on the forests" (Stebbing1922:532). E. P. Stebbing also contended that the rapacious private interests related to forests had been brought under scientific "supervision" and control. For imperial forest historians peace with nature was anonymous with peace among subjects of the empire(Stokes1959:1). In this context it may be said that the colonial administrators at the initial phase looked at themselves "as inheritors rather than innovators, as the revivers of a decayed system(Stokes ibid). The idea of this "decayed system" however originated from a teleological construction of Indian's past by the west which was often characterized by assertion on past glory accompanied by an idea of degeneration. This degeneration no doubt featured in every aspects social, political, economic and not excluded the forestry. Orientalist scholars were thus, defining Indian

"tradition" in a particular way that came to be privileged as the most authentic version or true knowledge, for it was legitimated by the power of the colonial state. Thus orientalism was a knowledge thrust from above through the power of the European (Irschick 1994:6-13). Orientalism produced a knowledge of the past to meet the requirement of the present to service the needs of the colonial state(ibid). In fact the Orientalist tradition can be viewed in the establishment of linguistic connection between Sanskrit , Greek and Latin-all supposedly belonging to the same Indo-European family of languages by Jones. Infact Jones privileged India with an antiquity equal to that of classical west. Thus they wanted to preserve the existing statusquo and altered only little. But this policy of pragmatism that demanded continuation of existing systems altered, as Utilitarian ideas which began to talk of appropriate social engineering and authoritarian reformism began to influence English minds. Jeremy Bentham was the chief propounder of Utilitarian ideas and according to him the ideal of human civilization was to achieve the greatest happiness of the greatest number. This thought naturally generated much reforms for Indians. But the revolt of 1857 convinced many in England and in India that reform was "pointless as well as dangerous (Metcalf 1994:53). But not that the zeal for reform totally evaporated and every where the British administrators emerged as conservationists and protector of every sphere (Social, economic, political) not excluding Indian forests. But the post 1857 reforms were marked with celebration of the superiority of the conquering race. Utilitarian tendencies were now replaced by authoritarian liberalism which sought to earn respect for the British empire. Any action undermining that respect, Henry Dundas the President of the Board of control had argued as early as 1793 would surely "ruin our Indian Empire" (Ballhatchet1980:2-3). Thus pronouncements of physical segregation between the ruler and ruled as an ideology of empire building was clear in English minds but was never implemented. Post 1857 phase witnessed such implementation through promulgation of annexationist reforms meticulously concealed with conservationist attitude by citing the defects of pre-colonial administration.

# 3. Implementation of Colonial Forest Policy

Scientific forestry in India was instituted after the establishment of Forestry Department in 1864. The initiation of scientific forestry was based on the same tenet of orientalism that asserted India's past glory accompanied by the idea of degeneration. This degenerative state was further emphasized by Richard Grove(Grove1995:467) who analyzed this colonial conservancy trend as motivated chiefly by the desiccationist (to turn dry) trends of pre-colonial forests of India. Ravi Rajan(Rajan2006;5) harps on the idea that the spread of modern forestry and conservation ideas in British colonies were chiefly motivated by desiccationist trends in Indian forests. The economic consequences of this desiccation prompted the government between 1850 to 1947 to initiate forest policies. This was a legacy of post- 1857 thinking.

This scientific forestry was an evolving scholarship on the attitude of British forest administrators to natural resource management that only tightened the grip of foreign encirclement of Indian forests and drafted in this process a new nature- human relationship which denied the age-old ties of Indians with nature. This break in ties which was significantly characterized by increasing valorization of engineering and reductionism, took away the vitality and viability of conservationist position (Well 2006:320-321) of colonial power. However, this conservationist trend was meticulously projected under the guise of technology and machines can be viewed as key agents for spread of civilization (Adas1990:402,403). Infact forest conservation became a paradigm of "technology ideology of human" as suggested by Michael Adas(ibid) western scientific discourses and practice emanates from the 17<sup>th</sup> C. European revolution in scientific thought. In India the British rule witnessed the emergence of a complex colonial system of authority which was fanned by the ultimate emergence of science as a product of 19<sup>th</sup> C industrialized west. The establishment of forest department in 1864 and subsequent opening up of many branches of modern natural science like Botany, Entomology, Wood science, Forest chemistry by responsible forest officers was the outcome of the unfolding authority of science. Natural history of Indian flora remained the most actively pursued European scientific investigation in the 19<sup>th</sup> C India. This offered almost an unparalleled diversity of timber resources and plant resources.

#### 4. The Role of Science in the Implementation of Forest Policy

The role of science in the history of imperial expansion has been given much importance in recent years. The view that science has freely intensified the momentum of extending the pace of progress and civilization and that it is a selfless annexure of a civilized society, has been increasingly challenged by the historians of science. Today infact, applied science and technology have been described by some writers as indispensable tools of expansions and consolidations of Western imperialist hegemony. Daniel R. Headrick(1981) has linked the dramatic assertion of European imperial hegemony in the 19th C to the power resulting from industrial technology. Infact science appeared to have been firmly integrated into the productive mechanism. Lucile H. Brockway(1979:35,36) analysed the political effects of scientific research in some plants of extreme imperial interests in the 19th and 20th C and how British Botanical science energetically furthered British expropriation of world's plant resources. This task was undertaken, by the British Botanical garden or Kew Garden of Britain to promote prosperity of the empire. Brockway cites the transfer and scientific development of useful economics plants from Kew Garden of British to promote prosperity of the Empire. These were planted at various British colonies for commercial profits. The new plantation crop complemented Britain's home industries to from a comprehensive system of energy extraction which made Britain in 19<sup>th</sup> and early 20<sup>th</sup> century, the world's super power no wonder therefore, researchers planters and search parties were sent to different colonies to appropriate the utilization of forest produce. This event undoubtedly contributed to the development of western economy. This has been used by environmentalists like A.W. Crosby (1992) in critical light who termed this process as "the Columbian Exchange" (ibid). The result was also felt in the enhanced food supply which nearly doubled the world population. Thus the European scientific activities in the colonies in the process of imperial expansion have been conveniently termed as Colonial Science in some recent writings(ibid).

Science and imperialism, two of 19<sup>th</sup> C Europe's most thriving enterprises were clearly linked. As Pietro Redondi(Redondi, Pillai1989; 11-26)points out "Under the banner of progress, modern science provided cultural legitimacy for the eradication of the customs and local superstitions of countries of non- European civilizations. J.D. Bernal(1939)pointed out that science closely reflected economic development and science should be seen as a guide to social policy. Donald Fleming(1962:178-196) however has given a different perspective as he asserts about increasing dependency of colonial science on European study of Natural Science. In fact the spread of Western Science from Europe to these countries is subjected to the problem of enforced provincialism'. This phenomenon of absentee landlordship in science placed colonial scientist at a disadvantage as the environmental condition of Europe and the Tropics were totally different. Thus the advent of scientific thinking as an offshoot of imperial expansion significantly altered the attitude of colonial masters towards forests. The post 1857 phase witnessed significant adoption of steps which influenced the British Indian Forest Policies.

## 5. The Implementation of First Forest Act

Lord Dalhousie in 1862 inaugurated a department that could support the sustained availability of the enormous requirement of the different railway companies for sleepers which now made the subject of forest conservancy an important administrative question(Trevor and Smythies1923:5). However forest conservancy to support timber supply for Royal navy had turned the imperial attention towards Indian Forestry around 1806(Stebbing1922:63). In 1846 measures were taken to monopolize the forest areas and resources by Lord Dalhousie. A collaborated phase of forest administration was undertaken with the establishment of Forest department in 1864 and in the same year Mr. Dietrich Brandis was appointed as the first Inspector General of forests of Government of India. In fact, Dehradun emerged as the chief centre of Scientific Forestry or Forestry Research and in 1867 a Forest Department was established in Dehradun(Forest Research Institute and Colleges:p-1). At this initial stage it originated as a "Forest School" where training of Forest Rangers and Foresters took place(Ibid).

Thus with the appointment of Mr. D. Brandis in January, 1856 as Inspector General of Forests, the dawn of Scientific Forestry started in India(Ribbentrop op.cit:72). Railways, also as Madhav Gadgil (Gadgil and Guha1992:122) remarks, constituted the crucial watershed with respect to forest management in India as it was one of the most important motivating factors to start an appropriate department to assist and safeguard state control over forests by curtailing the previously untouched access enjoyed by rural communities and first attempt at asserting state monopoly was through the Indian Forest Act of 1865(Proceedings Of The Lieutenant Governor of Bengal). This act sought to establish the claims for railway supplies, subject to the provision that existing right were not to be abridged.

The 1865 Act exercised only a tenuous control and efforts were made to execute a strict and comprehensive piece of legislation. A preliminary draft prepared by Brandis in 1869(1869) was circulated among the various presidencies. A conference of Forest Officers convened in 1874, went into the defects of the 1865 Act. The conference provided the basis for a memorandum on forest legislation prepared by Brandis in 1875(1875). This memorandum further worked on by Brandis and senior servant, B.H. Baden- Powell, culminated in the Indian Forest Act of 1878(ibid). The 1878 Act subsequently amended applied to the whole of British India, except Burma, Madras, Assam, British Baluchistan, Ajmer and North West Frontier Province The Act of 1878was modified by an Amendment in 1927 continued to be in operation upto 1947.

## 6. Conclusion

Thus in South Asia the history of scientific forestry has been fully documented and the forest department quickly became a reviled arm of the colonial state. When this comprehensive Indian Forest Act was enacted in 1878, to supersede a preliminary Act of 1865, the government was warned that the new legislation would leave a deep feeling of injustice and resentment amongst the agricultural communities. Such massive colonial encirclement of forest in the name of conservation might leave every class whose support was desired and essential to the object of conservation. However the implementation of scientific forestry and consequent scientific conservation aroused much resistance and revolt from the forest zamindars, hill toda whose actions denoted wide scale resistance to the operations of the forest department in all kinds of ways: through arson, breaches of the forest laws, attacks on officials and on government property, and often through organized social movements which aimed at the restoration of traditional local power that could safeguard the rights and policies of the forest dewellers. These rebellions were soon amalgamated into wider nationalist upsurges and formed the basis of larger nationalist issue of British India and was picked up by eminent nationalist leaders to flare up the movement for national independence.

#### 7. References

- i. Adas, Michael(1990) .Machines as the Measure of Men:Science, Technology and Ideologies of Western Dominanace",.OUP. Delhi.pp-402-403.
- ii. Ballhatchet K.(1980) Race. Sex and Class under the Raj. Weidenfeld and Nicholson London, pp 2-3, 96-97.
- iii. Bernal, J.D. (1939). The Social Function of Science. The Macmillan Company. New York.
- iv. Brockway ,Lucile. H.(1979). 'Science and colonial expansion, the role of the British Royal Botanic Gardens'. Academic Press, pp 35-36
- v. Brandis, D(. August, 1869, December, 1875). Explanatory Memorandum On Draft Forest Bill, IGF, 3<sup>RD</sup>
- vi. Fleming, Donald (1962). Science in Australia, Canada and the United States: Some Comparative Remarks, Proceedings Of The Tenth International Congress Of History Of Science, Ithaca. Paris. pp-178-196
- vii. Gadgil ,Madhav and Guha .Ramchandra(1992) .'This Fissured land An Ecological History of India' OUP. p -122

- viii. Guha, Ramchandra (2000)- 'Environmentalism-A Global History', OUP, Delhi . ,pg-3
- ix. Grove, Richard (1995). 'Green Imperialism Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism 1600-1860'. OUP .Delhi . p-467.
- x. Headrick, Daniel R(1981). "The Tools Of Empire-Technology and European Imperialism In the 19th Century", OUP,
- xi. Irschick, Eugene(1994). 'Dialogue and History: Constructing South India,1795-189.. Berkeley, Los Angeles, London: University of California Press. pp-6-13
- xii. Metcalf ,Thomas. R.(1994). "Ideologies of the Raj : The New Cambridge History of India".. Cambridge University Press.Cambridge.Vol.3.p-53
- xiii. Powell.,B,H,Baden(1875).Draft Forest Bill prepared by Mr. Baden Powell in NAI, Forests, B Progs nos 37-47, December. quoted in Fissured Land (op.cit) by Madhav Gadgil and Ramchandra Guha p-125
- xiv. Powell .B.H.Baden(1875) .On The Defects of The Existing Forest Law(Act XIII of 1865) and Proposals For A New Forest Act In B.H .Baden Powell And J.S. Gamble (Eds) (1873-74): Report Of The Proceedings Of The Forest Conference. Calcutta. pp-4-5
- xv. Proceedings of the Lieutenant Governor of Bengal,Revenue Department,Forests. Despatch 16<sup>th</sup> November 1865 From Secretary of State for India To Government of India(Jan.1866) WBSA.
- xvi. Rajan, S. Ravi (2006) "Modernizing Nature: Forest and Imperial Eco-Development 1800-1950" OUP, pg-5
- xvii. Redondi ,Pietro and Pillai ,P.V. (Eds).(1989)"The History of Science:The French Debate" Orient Longman.New Delhi,pp-11-26 (Introduction)
- xviii. Ribbentrop,B (1900). 'Forestry in British India'. Office of the Superintendent of Government Printing,Calcutta. India, pp-37, 61
- xix. Stebbing ,E.P(1922). The Forests Of India .John Lane.London.vol-1.pg.63.
- xx. Stokes, Eric(1959). 'The English Utilitarians and India'. Oxford: Clarendon Press. p-1
- xxi. The Forest Research Institute and Colleges (Its scope and functions), Government of India, Ministry of Agriculture, p. 1.
- xxii. Trevor, C.G and Smythies, Arthur (1923). Practical Forest Management. Government Press. Allahabad. p-5
- xxiii. Well,Benjamin(Apr 2006) .Conservation, Exploitation and Cultural Change In The Indian Forest Service,1875-1927. Forest History and American Society for Environmental History.11(2). pp-320-321