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# **Remnants of Primaeval Forests in Some Parts of Uttar Pradesh**

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Abstract: The present paper is an attempt to trace the forests, its flora and fauna that existed since ancient times in the different regions of Uttar Pradesh and which still has its remnants in the terai region and hilly tracts of Mirzapur. The paper looks into the significance of forests for the landed magnates and marginal castes of the region. Both the dominant and lower castes and tribes seem to have enjoyed the natural resources of the forests without discrimination in the pre-colonial era. The history of zamindars and their private domain in the forests is interesting to know how the old primaeval forests were carefully preserved by the zamindars of central and eastern Uttar Pradesh popularly known as Awadh and Allahabad since Mughal times. However, since the colonial period, we not only found that the large scale of forests were ordered to cut down for cultivation, but forests were reserved to protect timber for commercial purposes. Consequently, the precolonial privileges of all the castes and tribes in the forests were suppressed by the British forest laws. The study of the history of gradual depletion of forests, its flora and fauna and its impact on the livelihood of many in the regions of Uttar Pradesh has been studied with the help of Persian sources, English records, Forest Survey of India report and secondary data.

Keywords: Primaeval Forests, Jungle, Mud forts, Zamindars, Awadh, Terai

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## **INTRODUCTION**

A British surveyor, Donald Butter in early nineteenth century called the forests in southern Awadh (comprising present day central and Eastern Uttar Pradesh) as 'Primaeval' forests. According to him, since time immemorial these forests were carefully preserved by the zamindars of the region (Donald Butter, 1836, p.5). The region of Uttar Pradesh in India had been divided into different kingdoms of pre-colonial rulers. The Mughal rulers established their two major provinces out of twelve in this region known as the Subas of Awadh and Allahabad. The political boundary of these Subas kept changing with the time. By 1750s, Shuja-ud daula, a nawab of an independent kingdom of Awadh managed to expand the boundaries of his kingdom to a great extent comprising parts of Mughal suba of Allahabad, Rohilkhand and middle Gangetic Doab including Etawah along with the five Mughal sarkars or districts of Gorakhpur, Bahraich, Awadh, Khairabad and Lucknow. The present study is largely based on the forested area of the above regions. In the James Renell's Bengal Atlas of 1781, a considerable extent of forests could be seen till 18<sup>th</sup> century in the regions of Uttar Pradesh, extending upto the dense forest of Himalayan terai. However, it has been observed that as

soon as the East India Company started intervening in the different kingdoms of India after their victory in the battle of Plassey (1757) and Buxar (1764), such regions started loosing their forests within a short span of time. Simultaneously, the forests which contained valuable timber, were fenced as a Government reserve, where colonial style of forestry was developed solely aimed to gain maximum capital from the trade of major and minor produce of the forests. An interesting history associated with these forests was that they were very carefully preserved by the local landholders who had made huge mud forts amidst the dense jungles and used to enjoy hunting and fishing in their forested domain along with their armed retainers. British authorities faced strong resistance from such landholders owing to their strength in these forests. Consequently, the rapid extinction of forests and the fencing of forests for the capital accumulation, gradually deprived these regions from their natural resources, affected zamindari possessions and the livelihood of many castes and tribes dependent on forests though they gave stiff resistance at times. The adverse impact was also observed on the rainfall pattern of this region. Thus, it becomes historically important to understand the colonial style of forestry and the depth of its impact on the several naturally rich regions of India like Uttar Pradesh and how far it had been possible to retain the pristine primaeval forests with original flora and fauna.

## **REVIEW OF LITERATURE ON THE EXTINCTION OF FORESTS IN INDIA**

Since 1970s, we find the development of constructive historiography on the issues of extinction of forests, environment and livelihood.Shireen Moosvi (1993), tried to delineate the boudaries between forests and waste and forests and cultivation in the Mughal period. She compared it with the vegetation map of 1909. The comparison revealed the extent of cultivation in Akbar's time at 50 to 55 per cent of what it was in the first decade of the 20<sup>th</sup> century. David Arnold et.al ed. (1995), have taken up different issues related to forests. Most of the authors of the volume like, Neeladri Bhattacharya, Peter Reeves, Jacques Pouchepadass and David Hardiman have laid emphasis on the fact that how colonialism in India challenged the F. Braudel's model of long duree changes in nature by bringing rapid changes in the natural environment.

Madhav Gadgil et. al (1992), asserted that the revenue orientation of colonial land policy also worked towards the denudation of forests. With reference to E. Whitcombe (1971), the study highlighted that the fuelwood requirements of the railway in 1880s in the North Western Provinces, at a high level caused considerable deforestation in the Doab region.

In an interesting study, Chetan Singh (1991) have tried to show long drawn tussle between man and nature. According to his study, in the Himalayan terai, despite expanding cultivation, there were times and places when the forests reasserted itself.

In a special edition of the Journal, Studies in History, Volume 14, No.2, 1998, different dimensions of the environmental history has been explored. Like, the clearing of forests and agrarian colonization earlier seen as agrarian expansion then as deforestation but the journal emphasizes on the need to see how different sphere of human history are in varied ways mediated by relationship with nature. Mahesh Rangarajan (1998), in the same volume has shown the decline of wildlife in India due to the colonial policies.

Ramchandra Guha (2010), expressed the viewpoint that the relationship between the colonialism and ecological decline is one neglected by historians of modern India. In Uttarakhand the most important consequence of colonial rule was the system of commercial forestry. He argued that the ecological history cannot merely be the history of changes in the landscape. It certainly have linkages between environmental changes and human perceptions of the 'uses' of nature. Irfan Habib (2010), assessed that by the time of the British conquest, the primaeval forests in India had already been greatly reduced due to the expansion of agrarian fields. But, he also highlighted that there are enough evidence to show that in the upper Gangetic basin forests were still there partly protected by local chieftains as places of refuge and partly by local people as reserve pastures. According to him, the forests provided a stable income to the British government which led to implementation of Reserved forests acts where even the poorest had to pay for the humblest privilege in the forest. He also discussed about the large scale damage done to forests for timber-cutting by the contractors. Even the European tea planters got their land out of the forests reserves.

In the above background, the present paper has following objectives to study:

- 1. To make qualitative assessment of the old historical forests in the regions of Uttar Pradesh
- 2. To understand the difference between the pre-colonial and colonial wisdom of the forest management in the area of study
- 3. To map the remnants of the old forested areas in the study region

# TRACING PRIMAEVAL FORESTS OF UTTAR PRADESH

Due to ever increasing demographic pressure, civilizations preferred to expand their agrarian fields at the cost of forests. So, it is always challenging to demarcate remnants of old primaeval forests in any region. However, for central and eastern Uttar Pradesh which once came under the famous Mughal Suba of Awadh in Uttar Pradesh, the autobiographical account of Mughal rulers, foreign travellers account, British officers memoirs and Gazetteers are of immense help to delineate old forests cover that existed till 18<sup>th</sup> and 19<sup>th</sup> centuries in the region. Above accounts have also elaborately mentioned about floral produce and fauna present in these forests. On the basis of historical sources, the forests in the regions of Uttar Pradesh, could be classified into the three categories:

- 1. Terai Forests, including areas of Khairabad, Bahraich and Gorakhpur.
- Forests of Southern Awadh, including, Sultanpur, Rae Bareli, Faizabad, Pratapgarh and Lucknow etc. British officers, Donald Butter (1836) and W.H. Sleeman (1849-50), referred to these forests as 'reserved' forests of zamindars since time immemorial. Francis Buchnan (1807), described about the private domain of zamindars in the forests of Gorakhpur as well. The southern forests extended till Allahabad in the East.
- 3. South Eastern forests of Mirzapur or Chunar, which unlike above forests were on hilly tracts of Vindhyanchal ranges.

An important source to map the area generally under forest in the region of Awadh during Mughal period is James Rennell's Bengal Atlas, 1781, (sheet no. X, Oude & Allahabad with part of Agra and Delhi, 1780). It has been assumed that the forests shown on James Rennell's map, particularly all the northern forests above lat. 26<sup>o</sup> N also existed in the Mughal Period (Irfan Habib, 1982, p.31). Rennell showed huge belt of forests in the region of Mughal Sarkar Gorakhpur (Lat. 26+ Long. 83+) which is north-east portion of Awadh, extending upto the dense forest of Himalayan terai. Also in the adjoining area of Bahraich (Lat. 27+ Long. 82+) some forests are shown in northern portion of it. Dense forests are suggested in the Pargana Muhamadi of Khairabad Division. Further, Rennell show some forests in the south-east region of larger Awadh, i.e area under the Mughal Sarkar of Chunar (Lat. 25+ Long. 82+). Abul Fazl also mentions forests in the region of Chunar (H.S. Jarret trans. Ain-i Akbari, Vol., II, 1891, p.424).

In the 13<sup>th</sup> and 14<sup>th</sup> centuries most of the regions of Rohilkhand or Katehar seems to be covered with thick forests. Barani's Tarikh-i Firozshahi throw light on the impregnable forests and thorny jungle in the region (Mohd, Ifzal-ur-Rahman Khan, 1995, p.38). In the Mughal period no such thick forests are reported except a thick belt of forests over Shahjahanpur (Lat. 28+ Long 80+) penetrating into the Terai forests (Irfan Habib, 1982, Sheet 8B). However, in James Rennell's Bengal Atlas this forests belt is shown quite thin and scattered. With the help of Haft Iqlim, we can trace a tract of bamboo forests and Kan grass between Awadh (Lat. 26+ Long. 82+) and Gorakhpur (Irfan Habib, 1982, p.31). But this tract shows no forests in James Rennell's map. Mufti Ghulam Hazrat's *Kawaif-i Zila Gorakhpur* (1810) not only informs that the city of Gorakhpur was surrounded by forests but also informs about the denseness of the jungle in the parganas of Anola, Bansi, Silhat, Basti, Maghar and Gorakhpur (S.Z.H. Jafri, 1998, p.35). Francis Buchanan who surveyed the districts of Gorakhpur in 1807-11, estimated that out of the total area in the district of 7438 sq.miles, about 1450 sq.miles were covered with forests. Abul Fazl also informs about a forested zone around Chilupara and Mau in Gorakhpur region (H.S. Jarret trans. Vol.II, 1891, pp. 266-7).

Simultaneously, if we look into the Mughal suba of Allahabad, the fertile region of Banaras zamindari was the first region in the northern India after Bengal to come under permanent settlement (1795). As it was British policy to bring more and more wasteland and jungle under cultivation, the remnants of old forests seem to have disappeared by the end of 18<sup>th</sup> century in the region. The Duncan records which are based on surveys and settlement reports of the Permanent Settlement in Banaras zamindari and were compiled between 1781 and 1795 helps us to trace primaeval forests in the region. In the Mughal sarkar of Chunar where Rennell shows a substantial amount of forests, Duncan's account being compiled around the same period also reflects the same. For the pargana of Agori and Bijaigurh in the Mirzapur, J. Duncan reports that around 1744 A.D. the villages were a fourth or an eighth or a tenth part cultivated, all the rest were jungles and woods and haunts for deer, tigers and pasture for beasts (A. Shakespear, Vol.1, 1873, Appendix, p. LXXIV). Similarly, for another pargana of Chunar known as Saktisghur, Duncan records reveal with some accuracy the amount of forests in the unit of bigha. It had been estimated that out of the total 87,086 Bigha land, total jungle in were 39,007 Bigha which shows that 44.79 or 45% of the land was till then under jungle in the pargana of Saktisgarh (A. Shakespear, Vol.1, 1873, Appendix, p. CXIV).

Alongwith the sarkar of Chunar, Duncan records suggest that sarkar Ghazipur also had some thick patches of primaeval jungles uptill the end of 18<sup>th</sup> century. For a pargana Shadiabad, it was ordered to bring such waste land under cultivation which had been over run with jungles since ancient times (A. Shakespear, Vol.1, 1873, Appendix, pp. LXXXVIII-IX). It would be interesting to note that the published order for the waste land cultivation was only related to ancient waste land. The order states that, "the above is published for the information of all concerned, it being at the same time understood that this publication relates only to the anciently waste land such as hath for a century remained waste, and which has not been included in the four years Pottahs. Wherefore they are to obtain Pottahs for the cultivation of this anciently waste land in the form of waste land Pottahs" (A. Shakespear, Vol.1, 1873, Appendix, p. LXXIV).

In the early days of the Muslim rule in sarkar Ghazipur, there appear to have been clearings or cultivated spaces in the forests, occupied generally by a single, but sometimes by more than

W.H. Sleeman (1849-50), resident at the court of Lucknow, had given details of twenty-four belts of jungle in the kingdom of Awadh that existed before 1856 excluding Mughal sarkar of Gorakhpur. He estimated these forests roughly covering a space of 886 sq.miles (W.H. Sleeman, Vol.II, 1858, pp. 282-86).

# EXISTENCE OF FLORAL AND FAUNAL PRODUCE IN DIFFERENT REGIONS OF UTTAR PRADESH TILL 19<sup>TH</sup> CENTURY AS RETRIEVED BY THE DISTRICT GAZETTEERS OF BRITISH PERIOD<sup>1</sup>

# Gorakhpur

Flora: Sal, Jamun, Panian, Paniar, Resin, Asaina, Khair, Haldu, Semal, Jhigna, Mahua, Aonla, Shisham

**Fauna:** Tigers (became rare by 1870s), Wild Buffallo (disappeared by the 2<sup>nd</sup> half of the 19<sup>th</sup> century), Rhinoceros (disappeared), Leopard (Common), Wolf (disappeared), Bear (met occasionally), Wild pig (Common), Deers especially Chittal or Spotted deers (satisfactory), Black Buck (abundant) and Nilgai (abundant)

# Bahraich

**Flora:** Sal, Tun, Mahua, Haldu, Asna, Dhao, Bargad, Tendu, Bel, Asidh, Kajrauta, Jigna, Painar, Kumbhi and Agai etc.

**Fauna:** Tigers (had fallen off by the 19<sup>th</sup> century, chiefly found in the reserved forests), Leopards (numerous but their numbers have largely decreased), Wild Pig, Chital, Wolves, Bears, Hyaenas, Sambhar, Swamp Deer, Nilgai, Antelope, Hog Deer, Barking Deer, Jackals and Foxes

# Kheri

Flora: Sal, Babul, Khair, Bel, Mahua, Dhak, Madar, Amaltas, Tun, Shisham, Semal, Tamarind, Asin

**Fauna:** Elephant (no longer found), wild Swine, Swamp Deer, Samber, spotted Deer, Hog Deer, Barking Deer, Nilgai, four horned Antelope, common Antelope, wild Buffalo (disappeared), black Bear, Tiger (still exist in the less accessible jungles), Leopard, striped Hyaena, Wolf etc.

# Hardoi

Flora: Dhak, Karaunda, Bargad, Peepal, Pakar, Shisham, Nim and Bamboos

**Fauna:** Tigers (existed before 19<sup>th</sup> century), Leopards, Wolves, Black Buck, Nilgai, Chital, four horned Antelope, Jackals and Hares

## Sultanpur

Flora: Dhak, Shisham, Nim, Babul, Bel, Peepal, Bargad, Gular, Kakar and Mahua

Fauna: Stray Leopard (occasionally seen), Wolf, Nilgai, wild Pigs, Jackals, Fox, Hare and Monkey

#### Rai Bareli

Flora: Dhak, Nim, Babul, Bargad, Peepal, Tamarisk, Jamun, Tun, Shisham, Tin, Kasa, Kus, Pasahi and Lakh etc.

**Fauna:** Deer, black Buck (few), Wolves (much more rare than in former days), Hyaenas (extinct), Tiger and wild Buffalos (long since disappeared)

## Mirzapur

**Flora:** Bargad, Pipal, Shisham, Mango, Nim, Bel, Jamun, Tamarind, Aonla, Bahera, Tendu, Dhaora, Haldu, Bijaisal, Kalua or Arjun, Harra, Kulu, Gambhar, Mahina Bamboo, Sal, Dhup and Khair etc.

**Fauna:** Tigers (occasionaly found in the Maharaja of Banaras preserves in Chakia, and are scattered over the whole country south of the Son), Leopard (met with over the whole district, south of the Ganges, Hyaena (common beast of prey everywhere), Wolves (found over the north of the district but were no where common), Jackals and Foxes (abundant), Deer, Sambhar and Chital, still numerous in the Chakia preserves but elsewhere rare, black bug and Chinkara (confined to certain favoured localities) and Nilgai (found frequently in the Ganges Valley) etc.

The above details of fauna certainly reflects that there was a general decline in the number of wild animals in Uttar Pradesh by the 19<sup>th</sup> century.

## PRIMAEVAL FORESTS AND ZAMINDARS

Forests in central and eastern Uttar Pradesh have served as natural abode for local landed magnates known as zamindars in the medieval period. The zamindars had made their strong mud forts in the forests and used to reside in the dense jungles along with their armed retainers. Mughal and British accounts report that these zamindars were using these forests and their mud forts amidst the dense jungles, either to avoid agrarian taxes due from them or to assert their independence from the central power (Zahir-ud-din Malik, 1973, pp. 211-14, Insha-i Roshan Kalam, Arzdasht-I and Arzdasht-II). However, the actual strength of land holders in these forests, remain hidden till the revolt of 1857, when the British army made combing operation in the dense green forests. British authorities were surprized to see the immense strength of landholders in the jungles having large number of forts of varying size and the armed retainers. Approximately, 1783 forts were demolished by the British forces till 1859. Along with forts, various categories of arms were collected from such forts, like Canons -693, Fire-arms – 1,89, 937, Swords – 6, 74, 956, Spears – 50, 914 and Miscellaneous weapons – 6, 48, 289 (Nalini Singh, 2007, p. 609). British authorities were quite apprehensive of the strength of land owning class in Jungles. They made secret surveys but were not able to map out actual location and strength of their forested abodes. Donald Butter while classifying the forests in southern Awadh as 'Primaeval' forests reported that the zamindars used to make their mud forts inside green jungles which had narrow and intricate pathways, only known to landholders and their dependents (W. H. Sleeman, Vol. II, 1858, pp. 279-280). Generally revenue collectors were not taking risk by entering these forests. They were always too green to set fire and also person entering these jungles were seen from the parapet of the mud forts and which usually came within the range of matchlocks ((W. H. Sleeman, Vol. II, 1858, pp. 279-280). The forts appeared to be strategically made of muds having very

thick walls, so that the cannon shot could not set fire in it only clumps of mud used to fall apart when shot by the Cannons.

Francis Buchnan's survey report of 1807-11 of Eastern India, gives a descriptive list of forts in the Gorakhpur region which were by then taken possession or destroyed by the British authorities generally along with forests and plantations around it. According to Buchanan, such plantations and forests owed their origin to the family habits of zamindars who planted them around their forts (*Montgomery Martin*, 1838, p. 514).

W.H. Russel, in his eyewitness account of the combing operation of British forces in the jungles of Gorakhpur, gave a closer view of mud forts inside jungles. In one of the description about such forts, Russel wrote, that the fort was surrounded by a parapet of mud with three embrasured bastions, in the front of a dense forests which extended interminably on the flanks. Inside, it was protected by an abattis, which was a thick fence of thorns and pointed branches along with a thick hedge. It was then followed by a ditch, twenty five feet deep, twenty eight feet broad, filled in places with several feet of mud and water, and then again followed by embrassured bastion, fully thirty-five feet high from the bottom of ditch (W. H. Russel, 1957, pp. 266-268). In contrast to huge fortification, the inner lay out of fort was small having raja and his followers residence along with storehouse for grains, cooking place with cooking utencils, arms and ammunitions etc (W. H. Russel, 1957, pp. 266-268). The most interesting feature of these forts as reported were sallyports in the backyard of fort which like tunnel led out into the jungle in the rear (W. H. Russel, 1957, pp. 269).

## FORESTS CONSERVATION AND LIVELIHOOD ISSUES

The British officers of Awadh administration, strongly advocated that in India, government had an inherent right to all waste lands including forests. According to them, pre-colonial government never surrendered that right which was proved by the fact that custom posts were established for the purposes of levying tax on forest produce (National Archives of India/NAI, Foregn Department, Political Proceeding, 16-30 January, 1857, S.No. 1377, No. 57). It was also assumed that the impracticable nature of the dense jungle areas would have prevented the native governments from permanently enforcing its rights and acknowledged the nominal authority of local landholders.

Consequently, after the uprising of 1857, British government proposed to give propriety right to those who will clear the land within the forests along with a fair proportion of wasteland (National Archives of India/NAI, Foregn Department, Political Proceeding, 16-30 January, 1857, S.No. 1377, No. 57). Simultaneously, a system of conservancy was introduced asserting the sovereign right of government over the forests containing valuable timber without survey and investigation of claimants (National Archives of India/NAI, Foregn Department, Political Proceeding, 16-30 January, 1857, S.No. 1377, No. 57).

British government in India, made a policy to free government reserve forests from all interferences like grazing, the cutting of fuel or the felling of timber through strict conservancy rules. But closing of forests for neighbouring villages was not an easy project for the forests administration. The pastoral classes known as Ahirs and local tribes called Tharus believed to be from ancient times have roamed in these forest almost unchecked (NAI, Public Works Department, Forests, June, 1867, Proceeding No. 34/37). The frequent intrusion of villagers for cattle grazing, for procuring inferior timber, bamboo and firewood etc compelled Britishers to readjust the rights of villagers in their neighbouring forested areas. So, on the one hand, it was decided that the limits of the reserved forests should be extended to include open grassland and the belt of inferior timber outside the reserved forests, on the other hand, it was proposed to compensate the inhabitants of villages adjacent to government reserve forests for

the loss of the privileges formally enjoyed regarding grazing cattle, cutting inferior woods and fuel etc within forest limits (NAI, Public Works Department, Forests, June, 1867, Proceeding No. 34/37). Under three mile Rule (Clause VII of Awadh Forest Rules is known as the Three Mile Rule), it was stated that "*Permission will be granted to all villagers living in the forest or within three miles of the Government boundary line, to cut such timber as they may require for their own bonafide use, for domestic and farming purposes, such timber not being any of the six reserved woods*" (NAI, Public Works Department, Revenue-Forests, September, 1866).

Subsequently, it was realised that the protection of forests from enchroachment was perhaps difficult despite the relaxation given through three mile rule. As we go through the records of crimes and punishment under the forest rules, we find most of the convicts belonged to lower backward castes eg. Chamars, Lohar, Pasi, Koeri, kurmi. However, the pastoral castes of Ahirs were more in number as convicts (NAI, List of forest cases, 1870-71, 1873-74, 1875-76).

It is hardly reported in any pre-colonial account that the castes dependent on forests had ever faced any difficulty in using the natural resources from forests for their livelihood. Just because of the colonial mind-set, these castes were subjected to painful experience as all of a sudden, they got convicted as a criminal for using their natural right in the nature's domain. They were forced to pay heavy fines ranging from 4 annas to Rs.100 fine and from 7 days imprisonment to 6 months imprisonment (NAI, List of forest cases, 1870-71, 1873-74, 1875-76). For a smaller crime like taking out bark of Asna tree, 10 stripes were given as punishment (NAI, List of forest cases, 1873-74). Even, an Ahir caste person was convicted just for sitting under a Tikoee tree (NAI, List of forest cases, 1873-74). Fishing too was punished with a fine of Rs. 3 or 5 (NAI, List of forest cases, 1875-76).

# CHANGES IN THE FORESTS STATISTICS OF UTTAR PRADESH DURING THE 19<sup>TH</sup> CENTURY

- 1. South to North Awadh -W.H. Sleeman (1849-50) estimated 886.5 square miles of forests (all reserved by *zamindars*) on the route Sleeman had travelled from *southern* Awadh to *northern* Awadh. After 1859-60, no forest shown in this tract. Apart from this he estimates terai forests covered roughly 4 to 5 thousand square miles.
- 2. Government Reserve forests in Kheri, Gonda and Bahraich- Department of Revenue, Agriculture, and Commerce (1870-71), Forest Branch estimated 735 square miles.
- 3. Government Reserve forests in Kheri, Gonda and Bahraich-Department of Revenue, Agriculture, and Commerce (1877), Forest Branch estimated 824 square miles. No private forests reported.
- 4. Kheri+Gonda+Bahraich- British Agriculture statistics (1895) estimated, 920.5 square miles forests. No forests accounted in other districts.
- 5. Forests of Gorakhpur in British Period:
  - (i) **Francis Buchnan (1807-11)** gave an estimate of **1450 square miles** forests in Gorakhpur region.
  - (ii) **Public Works Department (1870)**, Forest Branch estimated only **264 square miles forests** (Government Reserve).
  - (iii) **Revenue, Agriculture and Commerce Department (1875)**, Forest Branch accounted very thin forests of **115 square miles** (Government Reserve).
  - (iv) British Agriculture statistics (1895), reported 172.6 square miles of forests (Government Reserve)

6. Chunar/Mirzapur – British Agricultural Statistics (1895), estimated 123.2 square miles (Government Reserve)

#### Forests Statistics of Forests Survey of India (2001)

- 1. Forests in Kheri, Gonda and Bahraich 943.54 square miles
- 2. Forests in Gorakhpur 183.16 square miles
- 3. Forests in Mirzapur 239.78 square miles

## India State of Forest Report, 2021 (www.fsi.nic.in)

- 1. Kheri -1,272.56 square kilometers = 491.20 square miles
- 2. Gonda 121.84 square kilometers = 47.03 square miles
- 3. Bahraich 556.11 square kilometers = 214.65 square miles

#### Kheri+Gonda+Bahraich = 752.88 square miles

- 4. Gorakhpur 79.06 square kilometers = 30.51 square miles
- 5. Mirzapur 746.11 square kilometers = 287.99 square miles

#### CONCLUSION

To sum up, it can be inferred that the areas which came under direct British control started loosing forests with rapid pace. Firstly, in the Banaras zamindari that came under direct British control in 1775, during the Duncan settlement (1795), most of the remaining forests were allowed to cut and cultivate. Similarly, when the region of Gorakhpur, came under direct British control in 1801, lost most of its valuable forests by 1850. Subsequently, in the kingdom of Awadh, which existed between, 1801 till 1856, the forests resources were preserved and enjoyed by the local rulers along with castes and tribes dependent on forests for their livelihood. However, soon after the annexation of Awadh by the East India Company in 1856, a massive uprising of 1857 broke out in Awadh against Company rule. As a consequence, within two years, from 1857 to 1859, all the forests not worth preserving were ordered to cut and cultivate, leaving a small tract of Goverment Reserve Forests in Himalayan terai.

Thus, it appears that the native ruling elites believed in enjoying natural resources by conservation. They perhaps did not deny natural rights and social justice although we do get reference of taxes imposed on forests produce common for all. It can be observed that the colonial policy makers did not care about the destruction of natural landscape of their colonies which were not gainful for them. Simultaneously, they conserved the valuable resources of forests with strict conservancy rules, exclusively for the capital accumulation under the big umbrella of nationalism. Above all, an important issue which emerges from the present study is that under different circumstances like colonial rule, demographic pressure and need for expansion of agrarian fields, requirement of timbers for building purposes, firewoods and moreover, the state policies in independent India have gradually caused depletion of the forests cover in the regions of Uttar Pradesh as shown in the forests statistics. However, we can still trace the remnants of primaeval forests in the regions of Kheri, Gonda, Bahraich, Gorakhpur and Mirzapur and can come together to restore the pristine ecology of such heritage forests.

#### NOTE

1. The 19<sup>th</sup> century, Gazetteers information is used to compile data of flora and fauna in the different districts. The Gazetteers mainly used are, *A Gazetteer of the Province of Oudh*, 3 Vols., Allahabad, 1877 and District Gazetteers of H.R. Nevill.

## REFERENCES

#### **Primary Sources (Unpublished)**

- *National Archives of India (hereafter NAI)*, Department of Revenue, Agriculture and Commerce, Agriculture and Horticulture Branch and Forest Branch.
- NAI, Foreign Department, Secret, Political and Foreign consultation.
- NAI, Home Department, Public Branch.
- NAI, Public Works Department, Forest Branch.

#### **Primary Sources (Published Documents)**

A Gazetteer of the Province of Oudh, 3 Vols., Allahabad, 1877.

Agricultural Statistics of British India, 1895-96.

- Buchnan, Francis District Reports (1807-11) edited and abridged by Mantgomery Martin, *The History, Antiquities, Topography and Statistics of Eastern India*, 3 Vols., London, 1838.
- Butter, Donald Outlines of the Topography and Statistics of the Southern Districts of Oudh, and the Cantonement of Sultanpur, Calcutta, 1839.

District Gazetteers, Volume, XXVI, XXVIII, XXIX, XXX, XXXI, XXXII, XLIV, XLV.

Forests Statistics of Forests Survey of India (2001).

India State of Forest Report, 2021 (www.fsi.nic.in).

Rennel, James Bengal Atlas, London, 1781.

Russel, W. H. My Indian Mutiny Diary, ed. By Michael Edwards, London, 1957.

Sleeman, W. H. A Journey through the Kingdom of Oudh during 1849-50, 2 Vols., London, 1858.

Voelcker, J. A. Improvement of Indian Agriculture, London, 1893.

Walker, Gilbert T. Memoirs of the Indian Meteorological Department, Vol. XXIII, Pt. VIII, Calcutta, 1924.

Martin, Montgomery History, Antiquities, Topography and the Statistics of Eastern India, London, 1838.

#### **Persian Sources**

Fazl, Abul Ain-i Akbari, H.S Jarret trans., Vol. II. 1891, Royal Asiatic Society of Calcutta.

Hazrat, Ghulam Kawaif-i- Zila-i- Gorakhpur, 1810, MS, Aligarh, Subhan Ullah Collection.

Rai, Bhupat Insha-i Roshan Kalam, MS, AMU, Maulana Azad Library.

Saksena, Rai Chaturman Chahar Gulshan, Hindi translation, Muhammad Riyazuddin Khan, Tonk, Rajasthan, 1990

#### Secondary Sources

David, Arnold et. al. *Nature, Culture, Imperialism,* 1995, New Delhi, Oxford University Press Gadgil, Madhav et.al. *This Fissured Land*, 1992, New Delhi, Oxford University Press Guha, Ramchandra *The Unquite Woods*, 2010, Permanent Black, Ranikhet Habib, Irfan, *Man and Environment*, 2010, Delhi, Tulika Books

- Habib, Irfan, An Atlas of the Mughal Empire, 1982, Delhi, Oxford University Press
- Jafri, S.Z.H., Studies in the Anatomy of Transformation, Awadh From Mughal to Colonial Rule, 1998, Delhi, Gyan Publishing House
- Malik, Zahir-ud-din, Problems of Fauzdari Jurisdiction in Baiswara, *Proceedings of Indian History Congress*, 1973.
- Moosvi, Shireen, Man and Nature in Mughal Era, Proceedings of Indian History Congress, 1993
- Rangarajan Mahesh, The Raj and the Natural World: The War against 'dangerous beasts' in Colonial India, *Studies in History*, Vol.14, No.2, 1998
- Singh Chetan, Humans and Forests: The Himalaya and the Terai during the Medieval Period, in Ajay S. Rawat ed. *History of Forestry in India*, 1991, Delhi, Indus Publishing Company
- Singh, Nalini, *Forests, Forts, and Arms: Resistance to Colonial Authority In Awadh, 1857-59, Proceedings of Indian History Congress, 2007.*