## REGIONAL ENVIRONMENTAL HISTORY Issues and Concepts in the Indian Subcontinent

Edited by VULLI DHANARAJU



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# Contesting Colonial Hunting: Impact of the Wildlife Policies in Assam

Geetashree Singh

Both the Asian and African rhinoceroses have been murdered for their horns to provide the Far Eastern market—and formerly the European market too—with raw materials for dubious medical and magical remedies. Once it would have been unthinkable that these two magnificent animals would ever be in danger of extinction, so great were their numbers and so extensive their ranges. But, today, both are in grave danger. Bans imposed on trading in these products are flouted by the international racketeers in the business.

-E.P. Gee.1

Colonial hunting emerged as an imperial ideology that reflects the changing nature of the colonial state towards forest communities in Assam. A perceived connection between hunting, power and privilege played an important role in the understanding of social relations in colonial Assam. The British forest policies had a huge impact on wildlife. Owing to the British wildlife policies there was a huge loss of human and animal life. The extermination of carnivores preyed on herbivore species that were preferred for hunting by the elite and restricted the use of forests, grasslands and other areas. The wildlife legislation in India started with the British need of controlling the extraction and transit of forest produce to extend their power over the forest resources including wildlife. On the other hand, the British forest policy tried to have full control over the access of forest resources by eliminating the local tribes from the cultural rights over the access of forest resources. Most of the forest dwellers of Assam were dependent on the forest for their livelihood but after the acquisition of Assam by the British they were considered as the greatest threat for the wild animals as they shared the same place and resources. Gradually forest legislations debared tribes from any kind of rights over forests and were denied access to the forest products including wild animals.

This chapter mainly focuses on the nature of forest policies in British India as part of the colonial necessities that primarily earn the revenue from forest resources and timber for ship building, railways, industries and exports made it essential for the government to control the forests. The extension of agricultural lands into forest areas was crucial to the state to maximise taxes. The increase of tea plantation after the 1860s led to the clearing of huge forest areas which were thrown into the direct human-animal conflict zone in colonial Assam. The paper also discusses the policies adopted by the British government such as reward giving, distribution of guns and gun licenses and appointments of professional shikaris to kill wild animals which ultimately resulted in the destruction of a large number of wild animals in Assam.

## Hunting: A Privileged Game

The British were unfamiliar with the concept of hunting before coming to India. Being highly influenced by the Mughal lifestyle they started imitating their lifestyle.<sup>2</sup> Hunting was one such feature which was practised by the Mughals in their leisure time. This brought the concept of the British game hunting. The practice of game hunting by British officials is evident from the large number of British records.<sup>3</sup> The British officials attached the hunting of wild animals with 'their masculine power' and on the other hand criticises the practice of the indigenous people. M.S.S. Pandian argued that *shikar* or game hunting was one of the aspects on which the colonial government tried to construct and affirm the difference between its 'superior'self and the inferior 'native' other.<sup>4</sup> While they presented themselves as risk-

taking, preserving and super-masculine the native people were considered as utilitarian and effeminate.<sup>5</sup> The British regarded the wildlife hunting as a sort of character-building 'masculine power' and marking good hunters as "potentially good soldiers, pioneers, explorers and leaders of empire."6 It became one of the aspects of elite class culture. The British officials on one hand call their hunting practice superior and on the other hand associate cruelty with the hunting practices of the tribes of Assam. The best example of such emphasis on cruelty on wildlife by native hunters of Assam was M'cosh's Topography of Assam. It mentioned, "The Singphos kill them by poisoned arrows fired from a musket, and after striking out their teeth, leave the carcasses to be devoured by beasts of prey."7 The British officials tried to show their method of hunting as sophisticated and more civilised against the indigenous method of hunting. However, strychnine (poison) was extensively used by the British officials for the destruction of wild animals.8

In the middle of the 19th century, Major John Butler of the 55<sup>th</sup> Regiment of the Bengal Native Infantry found the sport in Assam as an exciting pastime for the English sportsman. He observes, "From the vast extent of waste or jungle land everywhere met with it in Assam, there are perhaps few countries that can be compared with it for affording diversion, of all kinds for the English sportsman."9 Butler mentioned various forms of sport namely, tiger, elephant, rhino and deer sport.<sup>10</sup> In one day's hunting it was not an uncommon event for three or four sportsmen to 'shoot thirty buffaloes, twenty deer and a dozen hogs, besides one or two tigers.<sup>11</sup> Captain Pollock, a military engineer responsible for laying down the road networks in the Brahmaputra valley in the 19th century, an anecdote claimed, shot dead one rhino or buffalo for every breakfast.12 Sharing his hunting experience he further says, "I followed a rhinoceros for some way, but it had got into a tangled brake, where it was safe. I then came across some buffaloes, and shot a couple of bulls, one with very curious horns, forming nearly a circle, and all but meeting at the points."<sup>13</sup> This is how the British officials shared their hunting experience but there are no statistics which can show what numbers of wild animals were killed for game. Seeing these descriptions, there is no doubt that a large number of wild animals were killed by the British officials for game.

### **Extension of Cultivation**

The British attempted to clear the jungle for the extension of the cultivation which helped them to earn revenue. Moreover the tea plants grew wild in the jungle and the British government attempted to give tea plantation a more civilised form by establishing tea gardens over the wastelands. This subsequently brought several acres of forest land for tea plantation. The British officials were keen to spread the tea plantation where ever the jungles were cleared.<sup>14</sup> B.H. Baden Powell of the Bengal Civil Service, noted that "The discovery of indigenous tea in Assam gave a great impetus to the establishment of tea-gardens, and naturally the special rules for grant of considerable areas of waste to capitalists (as distinct from the ordinary miles for occupation of plots of agricultural land) had in view chiefly the extension of tea-cultivation."<sup>15</sup> The extension of tea gardens to waste land reduced the forest land for wildlife. Mahesh Rangarajan argued that there is no doubt that there were points of conflict between mega-mammals and people before the coming of European rule but these acquired a sharper edge during British rule.<sup>16</sup> There was no attempt at the elimination of wildlife prior to the British rule but the British government attempted at total annihilation of wildlife. In Assam the need for clearing the jungle was felt for the extension of tea cultivation, which was not possible without the annihilation of wild animals. Jayeeta Sharma argued that, "protecting nature necessitated that indigenous forests be transformed into the tea gardens which imperial science and commerce required."17 The extension of opium cultivation could also be assigned as one of the causes for the clearance of jungles. In 1860 the government monopolised the opium cultivation in the state and there was no serious attempt at discouraging the opium cultivation till 1921, when Mahatma Gandhi visited the province and discouraged the consumption of opium. Not only for the extension of tea cultivation but also to save the paddy fields from the attacks of the wild animals specially from elephants, tigers, rhinoceros, buffaloes and hogs attempts were made to clear the jungles.<sup>18</sup> The numbers of the wild animals decreased fast in consequence of the people having suffered much from the destruction of their crops by the wild animals.<sup>19</sup> Offering of a substantial monetary incentive for killing female wild animals and their cubs aimed at stopping of reproduction of these animals. In this way the eradication of the species helped in the extension of cultivated arable land.<sup>20</sup> The gradual extension of cultivation and opening out of the country led to the decrease of population of tigers and leopards in later years.

The extension of tea plantations was the main cause which led to the decrease of the waste land. This also caused the destruction of a large number of wild animals. "The new tea growers carved out great plantations in Assam, Ceylon, Indonesia, and later Africa and South America. Vast tracts of forest were levelled and countless animals destroyed to make way for the orderly rows of tea bushes."<sup>21</sup> E.P. Stebbing, F.Z.S., F.R.G.S., also agreed that the extension of cultivable land for tea plantation had affected the number of wild animals in Assam.<sup>22</sup> Similarly, a tea planter Mr. Barker commented on the clearance of jungles for tea plantation.<sup>23</sup> He affirmed that the clearance of jungle disturbs hundreds of monkeys. The clearance of jungle also affected the population of rhinoceros in the province. Mr. Barker viewed that, "Many rhinoceros have been shot within the last few years in the vicinity of Julpaiguri but there, partly owing to being constantly hunted, and partly owing to the clearance of large tracts for tea cultivation, they are rapidly becoming scarcer, and the sportsman must travel still farther east before he finds them at all plentiful. In the eastern portion of the Bhutan Dooars and in Assam, wherever there are heavy reed jungles on the banks of rivers or on the margin of swamps, rhinoceros may be met with, and occasionally several congregate in one covert."24 In this way rhinoceros became extinct from those places in which once they were numerous. Thus, the clearance of jungles led to the destruction of a large number of wild animals.

### Commodification of Wildlife

The British officials soon realised that wildlife and trophies could also be a commodity for trade. Human greed, trade and political expedience led to the destruction of elephants. Rhinoceros were killed for ivory and their horns were sold to the far eastern market as raw materials for making decoration materials and also dubious medical remedies. Rhinoceros horn was used in oriental medicine since long back.<sup>25</sup> The main user of this was China. It was used as traditional Tibetan medicine and was mainly used as an anti-pyretic and also as an aphrodisiac. It was used for making dagger handles and other decorative materials. During the Ahom period, skin of buffalo, rhinoceros, and deer was used to make *dhal* (shields) as an instrument of self-defence.<sup>26</sup> According to Captain Welsh's Report on Assam (1794), elephants' teeth, have always been an article of export. Rhinoceros horn were trifling articles of export.<sup>27</sup> The horn and skin of wild animals were extensively used for making decorative articles as described by Captain J.T. Newall, a soldier and sportsman, in his words, observed: "Samber {Ccifusaristotelis}, the largest of the deer tribe, is common to all parts of India. In Kashmir, the noble Barasingha, and some other allied species in Assam, and the south eastern parts of Bengal, can compete with this fine animal in size and appearance; but they are not distributed generally as is the sambur. The horn of the stag is three-typed, and when mature very massive. Its skin, when dressed as leather, is in great esteem for the manufacture of shoes, belts, saddle covers, and numerous other things. It is far softer, yet tougher, than common cow leather; and in consequence articles made of it fetch a higher price."28

Ivory carving was one of the thriving professions during the British rule. The ivory carvers were known as Baktars or Baktar-Khanikars. Ivory articles constituted the major portion of royal gifts to visiting grandees as well as distant dignitaries. The Baktars used to work on deer horns along with ivory carving. Deer horn artifacts were mainly made only for decoration.<sup>29</sup> But later by the end of the 19<sup>th</sup> century the number of ivory carvers

declined in Assam. The Census Report (1881) reported 917 number of elephant dealers in Assam. This was an important profession in Assam. However, it says that the number could have been more than recorded. The capitalist people were mostly involved in this business whose main profession was not elephant catching and those who were called elephant dealers were professional employees of the capitalists who took hunting licenses from the government.<sup>30</sup> But, this profession declined in the later part of the 19<sup>th</sup> century as the Census Report (1891) reported only four ivory carvers.<sup>31</sup> The decline of elephant population by the late 19th century could be the probable reason for the decline of the profession of elephant catchers. The decline of ivory was said to be the cause of disappearance of the art. Tribal hunters beyond the inner line sold out tusks to the traders who in turn sold them in Calcutta (Kolkata) with a good margin. The Marwari dealers used to buy tusks in Assam and sold them in Calcutta which fetched them more profit.<sup>32</sup> Colonel Pollock stated that, "Although the horns are contemptible as trophies, the native Assamese and Marwaris prized them greatly, and will give as much as Rs. 45 a seer (2 lbs.) for them. They were also greatly prized by the Chinese. Two officers, Cock (afterwards killed in the Naga campaign) and Bunbury, just before I arrived at Gowhatty, made a good bag of these beasts, and by the sale of the horns more than repaid all their expenses. They live in apparent harmony with wild elephants, and I have seen them lying down in the same mudhole with a buffalo."<sup>33</sup> Debrugarh was an important centre of the tusk trade. Ivory articles were luxury items for the common men. The price of the ivory articles shows that these were beyond the means of average households. From 1898-1900 the well-known ivory articles and their price was as follows, (a) comb for Rs. 5 to Rs. 20, (b) back-scratcher Rs. 20 to Rs. 50, (c) spoon and fork Rs. 30 to Rs. 50, (d) toyselephant from Rs. 30- to Rs. 55, horse Rs. 8 to Rs. 10, fish Rs. 1.8 to Rs. 8, cart Rs. 50 to Rs. 60, (e) bracelet Rs. 8 to Rs. 10, (f) knife handle Rs. 3 to Rs. 8 (g) ring Rs. 4 to Rs. 6 (h) Tema (small box) Rs. 4 to 6, etc.<sup>34</sup>

Rhinoceros horns were also profitable and good for trade.

A confiscated rhinoceros horn weighing 40 *tolas* has been sold by auction for Rs. 600 in Darrang. Almost every portion of a rhinoceros has a ready market value, the dried blood being especially prized. It is for this reason poaching was so rife.<sup>35</sup> Rhinoceros horns have always been valuable in India because of some supposed aphrodisiacal virtue but apparently still more so in China, the demand for horns in the market caused the extermination of *Rhinoceros sondaicus* in Burma except for a few individual specimens closely guarded by the forest department. China was undoubtedly after one horn rhinoceros (rhinoceros Indicus) with the consequence that a rhinoceros horn became worth more than a good pair of elephant tusks.<sup>36</sup> British officials agreed that there was too much money in this business.

The business was so lucrative that it appeared that snags were common in connection with the trade. For at one time the local Marwaris lamented that the Cacharis had palmed off on them bamboo roots, blackened and faked to look like rhinoceros horn the Cacharis went one better and sold them faked pieces of buffalo horn, it was not known if any 'acid test' was devised by that time.<sup>37</sup>A rhinoceros horn was worth about half its weight in pure gold in the open market, but the value of ivory was decreasing very greatly by 1931.<sup>38</sup> Other than this, taxes were also imposed on elephant hunting, elephant catching, rhinoceros hunting, etc.<sup>39</sup> Killing of tigers for trade also existed. Tiger's skin value was more in the market then the amount paid as bounty<sup>40</sup> and thus it was in large number. Even as early as 1871, Captain Rogers agreed that there was lakhs of amount in selling of skin of wild animals.<sup>41</sup> The killing of wild animals for trade was common. F.C. Daukes, Secretary to the Chief Commissioner of Assam also agreed that wild animals were killed for trade specially the smaller animals like pigs, deer, etc. In his words, "It is, however, observed from the returns received from all districts in which government guns are given out these guns are more frequently used for purposes of sport and the killing of buffaloes, pigs and deer for sale than for the destruction of dangerous animals."42 Thus the colonial rule in Assam led to the commodification of wildlife.

#### **British Policies Towards Wildlife**

The British government raised a fight against wildlife. The exploitation of forest resources and clearance of jungle for cultivation led the British government to adopt measures for the extermination of wildlife. Wild animals like tigers, buffaloes, stags and other animals made cultivation difficult which was the main source of revenue.<sup>43</sup> The British officials argued that the killing of wildlife is needed for the safety of life and property. This led the British government to initiate various measures for the destruction of wildlife. At the initial stage, there was a debate among British officials as to what measures to be adopted for the destruction of wildlife. After some of the earlier experiments it was decided by the Government of India as well as by the Provincial governments that giving of rewards was recognised as effective method. Reward giving became the most popular method of the destruction of wild animals during the British rule. Prior to British rule the reward giving was never practised by any ruler. Mahesh Rangarajan argued that the system of reward giving for the destruction of wild animals was 'utterly unknown to the original rulers of India.'44 The British began fresh infringements on the animal world with their systematic measures of extermination.<sup>45</sup> The introduction of rewards involved the local inhabitants, shikaris called from neighbouring provinces in the process of extermination of wildlife primarily for the sake of rewards and secondly for trade purposes. Mahesh Rangarajan argued that "Bounties aimed to eliminate cattlemarauding tigers. Saving draught cattle would help extend the area that was under the plough. Fewer tigers meant more cultivation and more revenue, their elimination a blessing of imperium after the elimination of an oriental despot. Unprecedently, larger rewards were given out for killing tigress, and special prizes for finishing off cubs. This was to be a war where no quarter was given."46 Large sums were given for the destruction of females and cubs of wildlife to stop the reproduction of wildlife.

The scale of reward varies from animal to animal. Reporting on the measures adopted in the provinces for the destruction of

wild animals, the Secretary to the Chief Commissioner stated the following measures: different rates of rewards were paid for the destruction of wild animals according to the nature of animals. For example, the highest reward was paid for the destruction of rogue elephant, viz. Rs. 100 compared to other wild animals. The lowest reward paid was Rs. 2 for the destruction of hyenas. The paying of rewards also depended on the nature of destruction in any districts. For the destruction of a full-grown tiger was paid Rs. 25 in North Cachar Hills, Sibsagar, Lakhimpur, Garo and Naga Hills but in other districts only Rs. 20 was paid. For the killing of leopards Rs. 5 was paid in all districts of the province, for wolves and bears Rs. 10 was paid. For the destruction of snakes rewards was not paid in all the districts but in some districts like Gauhati and Sibsagar a reward of Rs. 2 annas was paid. Other than, reward giving the gratuitous distribution of guns and ammunition in Assam Valley, Khasi and Jaintia Hills districts for the protection of human lives, cattle and crops from wild beasts also caused the destruction of wild animals in large numbers.

The pattern of use of weapons also changed with the introduction of modern weapons. Prior to the British rule, the local inhabitants used traditional weapons like bows and arrows, spears, and *daos* through which not many wild animals could have been killed but the supply of modern weapons like guns and rifles made the killing of wild animals easier than ever before. The free licensing of guns added to the destruction of wild animals.<sup>47</sup> The increase in the destruction of wild animals was more particularly after the distribution of guns among the villagers. Guns were mostly used by shikaris and license holders for killing of game for trade and not for the protection from wildlife. In addition to the free grant of licenses under the Arms Act (1878), government guns were gratuitously distributed to persons living in dangerous localities for protection from wild beasts. It was not only used for the purpose for which it was given out but it was used for the purpose of sports and pleasure.48

Appointment of the professional shikaris for keeping down

the number of wild animals was common during British rule. There were attempts to encourage men of the shikari class to keep down the wild animals. However, very few natives of the shikari class were in the province. It was confirmed by Colonel Pollock, Madras Staff Corps, during one of his hunting expeditions in the province said that, "we had no shikaris, as none exist in Assam."49 Thus, shikaris from the neighbouring province, Bengal were called up to Assam to keep down wild animals. Even the reward giving was not successful to control the wildlife in the absence of professional *shikaris*. The Secretary to the Chief Commissioner of Assam observed that "The success of the system of rewards, in fact, depends a good deal on the existence of a professional *shikari* class, who can be attracted by them to engage in the destruction of wild animals as a means of livelihood."50 Even the increase of the amount of reward paid was not successful in keeping down the wild animals in the absence of professional *shikaris*.<sup>51</sup> The use of poison like 'cobra poison' and dakara (aconite), was also in practice during the colonial period for the destruction of wild animals.<sup>52</sup> Apart from these, sports by the British officials and elite class also contributed to the destruction of wild animals. According to Rangarajan, "the deliberate and organised destruction of carnivores under government patronage was a novel feature of the British period."53

## **Impact of Wildlife Policies**

Human interference in wildlife habitation brought destructions of life and property by wild animals. If the natural food chain was not disturbed by the British to fulfil their greed the destruction by wild animals might also be missing in history except occasionally. The killing of herbivores by professional *shikaris* like deer, pigs, and dogs for trade caused a natural food crisis for the large carnivore. This led to massive destruction of human life and cattle by wild animals. Wild animals killed fewer people than cattle. According to the available statistics (1875-1915), wild animals were accounted to have killed an average of 14,931 cattle each year. On the other hand, human beings were killed on an average of 358 each year during 1875-1927. Snakes were very destructive for human life. According to the available statistics 18,604 people were killed during 1875-1927 by wild animals including snakes. Out of it 9,880 were killed by snakes alone which is 0.9 per cent of the total number of people killed by snakes and 8724 by wild animals which is 6.3 per cent of people killed by wild animals in India. Snakes alone caused more than half the deaths of the total deaths of people during 1875-1927.

The British policies led to the extermination of wildlife in the province as in other provinces of the Indian subcontinent. As argued by Mahesh Rangarajan that "The British came to the Indian subcontinent with a long history of a systematic campaign to exterminate carnivores in the British Isles."54 The policies of the Government of India led to the destruction of a large number of wildlife and also brought some of the animals on the verge of extinction. Balakrishna Seshadri argued that, "nowhere in the world has destruction of the natural wilderness -the habitat of wild life-proceeded with such speed and totality as on the Indian subcontinent. It has been the most decisive factor in the catastrophic diminution of India's wildlife -within and outside the sanctuaries-in the last twenty-five years."<sup>55</sup> The clearance of jungle was mainly to provide timbers for the newly constructed railways. In the initial years of the British rule wild animals were seen as pests whose elimination was encouraged with monetary incentives. Each year around thousands of wild animals were killed for rewards. According to the available statistics a total number of 1,68,112 wild animals including snakes were killed in fifty years (1877-1927). Out of which 90,102 were snakes which is 1.1 per cent of the total number of snakes killed in India and 78,070 were wild animals which is 9.2 per cent of the total number of wild animals killed in India. Out of 78,070 wild animals 21,541 leopards, 17,316 tigers, 12,823 bears and 155 elephants were killed. Wolves or hyenas were less in Assam valley unlike in other provinces of India where the British government attempted to exterminate wolves along with tigers and leopards. In Assam the destruction by wolves or destruction of wolves was less compared with the other province of Assam. The reason could be the killing of these animals might not be reported. Only 48 hyenas and 53 wolves were reported to have been killed during 1877-1927.

The colonial rule witnessed huge destruction of wildlife. The need of the extension of tea cultivation led the British government to adopt measures like rewards giving, sanction of special rewards, liberal distribution of guns and gun licenses, calling up of professional shikaris and use of poison. The reward system contributed to the killing of a large number of wild animals during the British rule. The calling of professional shikaris not only led to the destruction of carnivores but a large number of herbivores like deer, pigs, buffaloes were also killed for their skins and horns. Prior to the British rule traditional weapons like dao, bows and arrows, etc. were used to hunt but the British government supplied guns to the cultivators and villagers for protecting life and property from the attacks of wild animals. Guns were also given to professional shikaris to eliminate wild animals which had a huge impact on wildlife. The destruction of the wild animals was justified by the British as it was dangerous for human life and property. However, there were conflict of opinions between the British officials, some of them argued that the destruction of large numbers of carnivores led to the increased population of herbivores which were destructive for crops, thus, and the food chain was disturbed. Rhinoceros was mostly killed for sport and trade. Very few statistical records reveal the killing of rhinoceros. However, it was killed in large numbers as during the early part of the 20<sup>th</sup> century rhinoceros was on the verge of extension. It became extinct from areas where once they were numerous. Thus, the British rule led to the destruction of huge wildlife population in the province of Assam.

#### REFERENCES

- 1. E.P. Gee, *The Wildlife of India*, Sterling Publishers, New Delhi, 1986, p. 7.
- 2. William Dalrymple, *The Last Mughal: The Fall of Dynasty, Delhi, 1857, Bloomsbury Publishing, New Delhi, 2006.*

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- 3. C.E.M. Russell, Bullet and Shot In Indian Forest, Plain and Hill, W. Thacker & Co, London, 1900; Nuttall, W.M., Fauna, Bengal and Assam, Behar and Orissa: Their History, People, Commerce and Industrial Resources, The Foreign and Colonial Compiling and Publishing Co., London, 1917, pp. 631-640; Pollok, C., and W.S. Thom, Wild Sports of Burma and Assam, Hurst and Blackett, London, 1900; Moray Brown, Shikar Sketches with Notes on Indian Field-Sports, London, Hurst and Blackett, 1887, pp. 207-280; Jguy Fleetwood Wilson, Letter To Nobody, 1908-1913, John Murry, London, 1921, pp. 119-124; Colonel Kinloch, Large Game Shooting In Thibet, The Himalayas, and Northern India, London, Thacker, Spink and Co., 1885; Pollock, C., Sport in British Burma, Assam, Cassyah and Jyntiah Hills, Chapman and Hall, London, 1879.
- 4. M.S.S. Pandian, 'Hunting and Colonialism in the Nineteenth-Century Nilgiri Hills of South India', in Richer H. Grove, Vinita Damodaran and Satpal Sangwan (eds.), *Nature & The Orient: The Environmental History of South and Southeast Asia*, New Delhi, Oxford University Press, 1998.
- 5. Ibid.
- 6. K. Shivaramakrishnan, Modern Forests; Statemaking and Environmental Change in Colonial Eastern India, New Delhi, OUP, 1990, p. 90.
- J. M'cosh, *Topography of Assam*, Bengal Orphan Military Press, Calcutta, 1837, p. 45.
- 8. C. Pollock, *Sport in British Burma, Assam, Cassyah and Jyntiah Hills,* Chapman and Hall, London, 1879, p. 120.
- J. Butler, *Travels and Adventures in the Province of Assam, During a Residence of Fourteen Years*, Smith, Elder and Co., London, 1855, p. 215.
- 10. Ibid., pp. 215-220.
- 11. Ibid., p. 217.
- 12. P.D. Stracey, Quoted in Thaper, *Battling for Survivals: India's Wilderness Over Two Centuries*, OUP, New Delhi, 2003, p. 218.
- 13. C. Pollock and W.S. Thom, *Wild Sports of Burma and Assam*, London: Hurst and Blackett, 1900, p. 437.
- 14. D. Datta, *Cachar District Records*, Vol. 2, The Asiatic Society, Kolkata, 2007, No. 180 of 1853, p. 308.
- Powell Baden, A Manual of the Land-Tenures and of the System of Land-Revenue Administration Prevalent in the Several Provinces, Vol. III, Low Price Publications, Delhi, 1990, p. 410.
- 16. Mahesh Rangarajan, *India's Wildlife History: An Introduction*, Permanent Black, New Delhi, 2005, p. 23.

- 17. Jayeetha Sharma, 'Making Garden, Erasing Jungle, The Tea Enterprise in Colonial Assam' in Deepak Kumar, Vinita Damodaran, and Rohan D'souza (eds.), *The British Empire and the Natural World: Environment Encounters in South Asia*, New Delhi, Oxford University Press, 2011, p. 126.
- E.R. Grange, 'Extracts from the Journal of an Expedition into the Naga Hills', JASB, Vol. IX, Part II, pp. 947-53; Verrier Elwin, *The* Nagas in the Nineteenth Century, New Delhi, Oxford University Press, 1969, p. 214.
- 19. E.R. Grange, op.cit., pp. 947-53.
- Mahesh Rangarajan, Computing the Numbers of Tigers Killed for Rewards in British India, 1875-1925, NMML, New Delhi, 1996, p. 6.
- 21. S. Krech, J.R. Mancill, and Carolyn Merchant (eds.) *Encyclopaedia* of World Environmental History, London, Routledge, 2004, p. 1187.
- 22. E.P. Stebbing, *The Diary of a Sportsman Naturalist in India*, London, John Lane, 1920, p. 129.
- 23. G.M. Barker, *Tea Planters Life in Assam*, Calcutta, Thacker, Spink & Co., 1884, p. 126.
- 24. Colonel Kinloch, *Large Game Shooting in Thibet, the Himalaya, and Northern India*, London, Thacker, Spink and Co., 1885, p. 61.
- 25. A. Choudhury, *Kaziranga: Wildlife in Assam*, New Delhi, Rupa & Co., 2004, p. 8.
- 26. Lila Gogoi, *The Burangjis: Historical Literature of Assam (A Critical Survey)*, New Delhi, Omsons Publications, 1986, p. 214.
- 27. N.N. Acharyya, *Historical Documents of Assam and Neighbouring States*, New Delhi, Omsons Publications, 1983, p. 24.
- J.T. Newall, *The Eastern Hunters*, London, Tinsley Brothers, 1866, p. 453.
- 29. R. Saikia, *Social and Economic History of Assam (1853-1921)*, New Delhi, Manohar Publishers, 2001, pp. 56-57.
- 30. *Report of the Census of Assam for 1881*, Calcutta, Office of Superintendent of Government of India, 1883, p. 122, Section 224.
- R. Saikia, Social and Economic History of Assam (1853-1921), Manohar Publishers, New Delhi, 2001, p. 56.
- 32. Ibid.
- C. Pollok, *Incident of Foreign Sport and Travel*, London, Chapman & Hall, 1894, p. 67.
- 34. Ibid., p. 58.
- 35. *Quennial Review of Forest Administration of the Province of Assam,* 1924-25 to 1928-29, Shillong, 1929.
- 36. PRFA for the Year 1929-30, AGP, Shillong, Para. 20, 1930, p. 4.

- 37. PRFA for the Year 1929-30, AGP, Shillong, 1931, para 20, p. 5.
- 38. Ibid., Para 20, p. 5.
- 39. R. Sakia, 2001, op .cit., p. 30.
- Cited by Mahesh Rangarajan in Wildlife In India: Two Essays. NMML, New Delhi, 1996, (H.P., December 1890, Nos. 360-407, Note by J.P. Hutchins, September 30, 1890)
- 41. (NAI), Home, Public, 1870, August, File No. 71-73.
- 42. (NAI) Home, Public-A, November, 1889, File No. 236-269.
- Gunnel Cederlof, Founding Empire on India's North-Eastern Frontiers 1790-1840, Climate, Commerce, Polity, New Delhi, OUP, 2014, p. 183.
- M. Rangarajan, Fencing the Forest: Conservation and Ecological Change in India's Central Provinces 1860-1914, Delhi, OUP, 1996, p. 145.
- Anon. 'The Game and Game Laws of India', *Qly Review*, Vol. CCCXXXIII, 1888, p. 91, cited from M. Rangarajan, op. cit., 1996, p. 145.
- 46. M. Rangarajan, *India's Wildlife History: An Introduction*, New Delhi, Permanent Black, 2005, p. 23.
- 47. (NAI), Home, Public-A, December. 1885, File No. 69-101.
- 48. (NAI), Home, Public, 1890, December, 360-407.
- 49. C. Pollock, *Incident of Foreign Sport and Travel*, London, Chapman & Hall, 1894, p. 42.
- 50. (NAI), Home, Public, December, 1884, File No. 109-140.
- 51. Ibid.
- 52. A.M. Smith, *Sports and Adventure in the Indian Jungle*, London, Hurst and Blackett, 1904, pp. 103-104.
- M. Rangarajan, Computing the Numbers of Tigers Killed for Rewards in British India; 1875-1925, NMML, New Delhi, 1996, p. 6.
- 54. Mahesh Rangarajan, op. cit. 2006, p. 145.
- 55. Balakrishna Seshadri, *The Twilight of India's Wildlife*, John Baker Publishers, London, 1969, p. 13.