

# RHINOCEROS IN KAZIRANGA NATIONAL PARK

Nature and politics in modern Assam

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In September 2016, the government of Assam undertook a large-scale bureaucratic exercise to evict few hundred people from the neighbourhood of Kaziranga National Park. Those who were evicted were people living off agriculture, fishing or cattle breeding in the floodplains of the Brahmaputra River. The eviction was indeed a much-touted public affair. The state machinery used elephants, bulldozers, police and paramilitary forces to evict these few hundred families. The ensuing hostilities between the state machinery and alleged squatters led to the death of several people.<sup>1</sup> Much of this was the direct consequences of a 2015 Gauhati High Court judgment. The judgment was a result of several public interest lawsuits that were filed in the high court seeking eviction of alleged squatters from the park's newly defined boundaries. The judgment stated that Kaziranga National Park (hereafter KNP) should be made free from all possible human influence. The judgment had asked the government to make the park free from any illegal human occupation and also make room for expansion of the park's original boundary. The judgment had little doubt that 'the concept of national park in the Wild Life Act contemplates that there should be no human habitation'.<sup>2</sup> The tone of the judgment largely echoed the hegemonic public mood in Assam and received the appreciation of the protagonists of wildlife conservation. The judgment emphasised that villagers living on the fringe of KNP possibly connived in the poaching of wild animals:

The individual claims for a handful of persons is in conflict with the public and national interest. There have been persistent and repeated reports of poaching of rhinoceros, elephants and other wild animals. It is irresistible inference that the habitants in KKP [sic] area would fall in suspect group and they would be well-acquainted with the areas and animal movements, therefore they

would alone be in a position to do poaching successfully or abet poaching by others.<sup>3</sup>

The KNP administration however clarified that there were no squatters inside the KNP. Those who would be evicted were rather legal settlement holders or unauthorised settlers in the government lands. These government lands fall within the newly defined perimeter of the park. Indian laws stipulate that to redraw the perimeter of a park requires clearance of several environmental legal steps. While the government's views and actions regarding all these were largely obscure, the agrarian communities in the neighbourhood of the KNP were getting ready to spell out their rights in the environmental commons. Much of the ideological impetus for this emanated from a new era of political empowerment of agrarian rights within India's forestry programme after the landmark promulgation of India's Forest Rights Act of 2006.

As the Gauhati High Court pronounced its judgment, a general sense of uneasiness engulfed the neighbourhood of the park. This was soon followed by electioneering for the Assam Legislative Assembly in 2016. The main opposition Bharatiya Janata Party (BJP) left no stone unturned to make the poaching of rhinos in KNP into a highly charged election issue.<sup>4</sup> The BJP also promised to evict 'illegal squatters' from the territorial bounds of the KNP. These election promises paid off handsomely. After the election, in November 2016 the BJP-led Assam government declared its intention to fulfil its promises by evicting those encroacher families. In the run up to the eviction, residents refused to be shifted and energetically reasserted their claims to their lands and other natural endowments including fisheries and more.

The judicial indictment and political actions before and thereafter are a replication of bigger as well as more passionate public debates surrounding the questions of conservation and land rights in and around KNP. Increasingly a wider and more diverse set of institutions has joined these public debates to decide the future of the park and its surrounding landscape. Much of these debates are shaped by international wildlife conservation practices. The park is home to a wide range of fauna including the greater one-horned rhinoceros, perhaps the most endangered species of the Indian megafauna. In recent decades, there has been a major flow of international tourists to KNP who are increasingly captivated by the wild stories told about it. The park has also emerged as a major source of income for thousands of petty entrepreneurs as well as a handful of Assam's regional capitalists. In the poverty-stricken economic setting of Assam, the KNP offers a small hope for the poor. In recent years, the fact that the park has been recognised as a UNESCO World Heritage Site has elevated it to an important place in the body-politic of Assam.

What gets embedded into these public debates and political practices is the power of the cultural politics of Assam. The one-horned rhinoceros is

available in only a few places in India, and the park for a long period of time was proud of its exclusive history of ownership, which had greatly shaped these cultural politics. What gets lost in this narrative of cultural politics is the complex ecological history of the Brahmaputra Valley, which plays an important role in making the ecological space of KNP a thriving one.

These questions are essentially and inescapably linked with two contentious subjects: the conservation challenges of the megafauna, including the flagship greater one-horned rhinoceros in particular,<sup>5</sup> and the lives of agrarian communities. Public debates, given shape largely within the Assamese public space, increasingly aim at alienating the agrarian communities from the landscape of the park. The governmental institutions also further reinforce this anti-agrarian public rhetoric. A series of legal and executive prescriptions try to sanitise KNP from all human influences. Over the decades, the park administration has also repeatedly articulated ideas of a shortage of space for increasing wildlife. This warranted overstepping the territorial limits of the park into agrarian space. Over the years, a set of legal and forestry prescriptions, which ignores both the landscape and ecological complexities of the region, has now set the tone for the governance of the park. These ideas are generally immune from the complex ecological, historical and political realities of Assam.

How does one understand the complexities involved in these public debates? This chapter tries to answer this. It begins by outlining the historical evolution of KNP, which needs to be prefaced by an understanding of the rhinoceros in an era of imperial hunting. The chapter then traces the administrative and political battles that went into the making of the KNP largely in a floodplain agrarian setting.

### **Towards an era of great hunting**

Assam's pre-colonial landscape was not free from hunting. Royal hunting, illustrative of the grandeur of Mughal power, had a weak resonance but could hardly replicate it in its grandest form. A close reading of the contemporary Assamese records suggests the absence of large-scale violence against fauna. Neither did the local populace have extensive access to firearms. Rudimentary hunting traps, often made of bamboo, hardly gave the population enough advantage over the megafauna. Rather, some megafauna were trusted allies of Assam's medieval rulers. Elephants, like other Indian rulers, were the smartest animals whose importance in the making of the medieval polity of Assam is well-recorded. Political and economic reasons helped in the simultaneous growth of expertise on the care and husbandry of animals elephants or horses. Much of the expertise acquired sophisticated form and extreme labour was taken to put that knowledge on record. The best illustration was the *Hastividyardarva*.<sup>6</sup> This mid-18th-century illustrated Assamese manuscript is perhaps one of the best examples to highlight the role

played by elephants in the political landscape of medieval Assam. One can also cite the example of *Ghora Nidan* which incorporated details about local knowledge on understanding and care of horses.<sup>7</sup> Elephants and their tusks constituted an important portion of tribute to the Ahom royal treasury from their feudatory chiefs. Conflicts over the supply of elephants to the royal household had eventually led to three decades of political unrest in the late 18th century. This eventually led to the decline of the Ahom kingdom.<sup>8</sup>

In the floodplains of the Brahmaputra Valley, while everyone excelled in fishing, there was little to suggest that big hunting was practised on a large scale. Deer meat was exotic but nonetheless available for a wider section of the people. In the hills and foothills, innumerable ethnic communities keenly pursued a wide range of hunting practices. Their everyday life was tuned to the rhythm of small-scale hunting.<sup>9</sup> The primary motivation for hunting was for food. Also religious taboos restricted large-scale killing of animals. Absence of firearms also ensured that animal hunting remained confined to a limited few.

What changed since the mid-19th century was the arrival of big-game hunting in Assam. As the 19th century progressed, Assam, after the story of prospect of tea cultivation broke in faraway England, became part of a spectacular narrative of wilderness. Assam's fauna became a source of attraction for game and sport for many willing British who decided to travel to this far-off place. If a tea plantation could bring great speculative wealth, Assam's great fauna would help them to be in a familiar landscape of homeland. For many young British, the idea of the wild Assam was greatly attractive despite its remoteness from Calcutta. Unlike three presidencies in British India, Assam, despite her promise through the massive British investment in Assam's tea plantations, was a place far away from home. But her fauna and wilderness could still attract many. Each aspired to become a skilled hunter while in Assam. Assam's fauna came under tremendous pressure.<sup>10</sup>

In the decades to follow, while big animals were either ruthlessly killed or maimed, many escaped this cruelty. The most illustrative of them was the elephant. As the luckiest, the elephant became partner in the empire-building process. It helped earned substantial revenue. The number and variety of unlucky ones however was more widespread, though game hunting was not a very favourite activity in Assam mainly because of the soil condition of the region.<sup>11</sup> The attraction of Assam for sportsmen was best captured by R. S. S. Baden-Powell, who catalogued India's best hunting grounds:

In Assam and Burma, as in many other parts pig is plentiful, but the ground impassable. On the Brahmaputra the pig are abundant, in fairly open country but as it consists for the most part of paddy fields, the ground is only passable in dry weather, and is then so hard, slippery, and fissured, that it is unrideable even to men like Colonel Pollok, accustomed to cotton soil.<sup>12</sup>

In the middle of the 19th century Major John Butler of the 55th Regiment of the Bengal Native Infantry found the sport in Assam an exciting pastime for the English sportsman. He wrote, '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'.<sup>13</sup> Butler catalogued a range of sports. He proudly claimed how in one day's sport it was no uncommon event for three or four sportsmen to 'shoot thirty buffaloes, twenty deer and dozen hogs, besides one or two tigers'.<sup>14</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 (Saikia, 2009). The Indian hinterland was richer than England in terms of the availability of game animals. Europeans were keen to experience the thrills of the chase and hunt. Encounters with big animals like the 'savage tiger' and the 'noble lion' were far more attractive and exciting than the routine business of spending small shots on birds. For James Forsyth, posted in India in 1857, 'the main attraction of India lay in the splendid field it offered for the highest and noblest order of sport, in the pursuit of the wild and savage denizens of its forests and jungles, its mountains and groves'. The range of the firearms of the colonial officers however may well have limited the impact of early British hunters on local fauna. Antelope shooting for instance could be only successful if the hunters got within 80–100 yards of the animals. The Assamese also across their class position participated in the hunting, as it was not merely confined to the higher echelons of the society, the poor too killed wild animals.

Some animals who made the floodplains their home encountered a great challenge. But there were also stories of survival. One of them was the wild buffalo. Integral to the Assamese rural landscape, and melodiously described in Assamese folklore, wild buffalo were increasingly seen in the official narratives of the British revenue officials as a big challenge to agriculture. Butler reported that in lower and central Assam large herds of hundreds of buffalo were frequently met with and the devastations committed on the paddy field was incalculable. T. T. Cooper, a British sportsman in Assam, said of the wild buffalo, 'it was so numerous and so destructive as to be an absolute pest'.<sup>15</sup> But this did not necessarily act against the wild buffalo. What helped them to survive was the lucrative grazing economy. By the early 20th century buffalo grazing became a powerful component of Assam's rural economy. Buffalo grazing in the vast floodplains of the Brahmaputra had greatly transformed the rural economy by encouraging migration of Nepali grazers from the Terai and allowing the flow of speculative capital into this economy. Some animals faced extreme hostility but required official protection. This was the case of the one-horned rhinoceros.

Almost everyone amongst the British officers took to hunting. Butler had no doubt that 'almost every military officer in civil employ in Assam, having

constantly to roam about the country, becomes, if not from choice, at least in self-defence, a keen and skilful sportsman'.<sup>16</sup> Throughout the 19th century hunting in Assam and Burma became a major source of incentives for the British officials to take up a job in India. A. H. Meyse Thompson wrote in 1899:

A young man in receipt of a comfortable salary can enjoy many things which are beyond the reach of any but the wealthy at home. . . . If he has a taste for sport, he can at very small expense spend his leave in shooting rhinoceros, buffalo, and bison.<sup>17</sup>

### Rhinos and the imperial fantasy

The majestic character of the rhinoceros was known to the Europeans. Carolus Linnaeus (1707–1778), father of modern taxonomy, mentioned in his 12th edition of the *Systema Naturae* (1766) that India was the habitat for the rhinoceros unicorn. The one-horned Indian rhinoceros definitely drew attention of the European naturalists prior to the 19th century. The rhinoceros drew the attention of the naturalists of Europe in earlier centuries. A number of naturalists between the 16th and 18th centuries either referred to India as habitat of the rhinoceros or paid special attention to its taxonomy. Carolus depended upon the texts of earlier scholars who reported on the Indian rhinoceros unicorns. It was surely in abundance in the first half of the last millennium in north and north-western India. A series of accounts between the 11th century and 16th century agree on the large-scale presence of the rhinoceros in India.<sup>18</sup> Accounts from the early 15th century indicate the presence of rhinoceros in the north Indian plains.<sup>19</sup> The Mughal accounts, especially those of the first emperor Babur, gave details of rhinoceros (*R. sandaicus*) including their hunting.<sup>20</sup>

Early British officials in Assam frequently reported the presence of rhinoceros. Their accounts contained details of these animals like their anatomical classification, ecological behaviours and also ecological distribution.<sup>21</sup> One such illustration was that of John McClelland, an assistant surgeon with the East India Company, who visited Assam in 1835 as part of the East India Company's appointed Tea Committee. Later he officiated as a superintendent of the Calcutta Botanical Garden from 1846 to 1847 and was also the editor of the *Calcutta Journal of Natural History* between 1841 and 1847. In 1841 McClelland prepared a detailed list of *mammalia* and birds collected in Assam and it was then that *Rhinoceros indicus* became listed as *mammalia* collected from Assam.<sup>22</sup>

But it was the stories of rhinoceros hunting in Assam and northern India was a major source of entertainment for British readers. Available British accounts of the hunting of the rhinoceros, largely unfamiliar to European eyes, are narratives of celebration of a megafauna which possessed

enormous physical power. British tourists had taken immense pleasure in hunting and spotting the rhinoceros.<sup>23</sup> Specimens of the one-horned rhinoceros were sent from India to British natural history museums. In 1844, the Royal Institution of Cornwall received one skull of this animal which was sent by Assam's commissioner F. Jenkins along with other specimens.<sup>24</sup> Martin in his extensive accounts in *Eastern India* gave the earliest account of the rhinoceros. He reported that rhinoceros was found wherever 'there are forests and extensive thickets of reeds'. In northern Bengal, he reported, many earned their livelihood by hunting this animal. He thought that the animal was 'quite harmless, and neither injures the persons nor crops of the inhabitants'.<sup>25</sup> The *Oriental Sporting Magazine* regularly published several pieces on rhino hunting in Assam. Such hunting expeditions often met with unexpected challenges from other big animals and the complex ecosystem. The hunters normally roamed around grasslands and river islands, crossed flooded rivers and swampy lowlands and needless to say they travelled mile after mile to chase their prey. Despite large numbers of rhinoceros being killed, even by the 1880s, rhinoceros were still 'plentiful in some out-of-the-way districts' wrote George M. Baker, a tea-planter, in 1884.<sup>26</sup>

However, even with the rapid spread of hunting in Assam, the rhinoceros still had some defence. How was it possible? Butler was also of the view that 'rhinoceroses are very numerous in many parts of Assam, and are to be found in very high grass jungle, near inaccessible miry swamps, which preclude pursuit, and having thick skins'.<sup>27</sup> Not everyone could hunt the animal. Butler agreed that 'they are not easily shot'.<sup>28</sup> The Assamese supposedly had a fear of them. 'Elephants dread the charge of a rhinoceros as much as that of tiger, and the grunting noise of the former animal not unfrequently scares even a well-trained elephant from the field'. The elephant had every reason to be worried of the rhinoceros. 'If the rhinoceros succeeds in overtaking the elephant's sides or legs, and with the horn on the nose not unfrequently inflicts fearful wounds'.<sup>29</sup>

One of the most celebrated and addicted rhino hunters was the Maharaja of Cooch Behar. Between 1871 and 1907, the Maharaja had claimed he shot dead 207 rhinoceros.<sup>30</sup> In 1899 the Maharaja, along with several members of the British aristocracy and his own family, shot dead five rhinos on a half-day on March 7.<sup>31</sup> These were instances of those hunting expeditions whose information found space in the world of newspapers. There must have been many more. The animal, due to its majestic demeanour and the uniqueness of the horn, began to be displayed at royal ceremonies. The Colonial and India Exhibition of 1886 displayed 'shields of rhinoceros skin, with gold and steel bosses, and steel shields curiously damascened'.<sup>32</sup> One over-enthusiastic Indian prince sought permission to parade a rhino in the Delhi Durbar of 1903.<sup>33</sup> But by this time there was significant mercantile interest in rhino horns. J. Errol Gray, a tea planter in Assam who toured the hilly regions into further east of the Brahmaputra Valley, came across a

thriving trade in the rhino horn between Marwari merchants and the Singpho tribes.<sup>34</sup>

There were more painful accounts of rhino hunting. M'cosh, the British officer mentioned how

the mode of taking them [young calves] is first to shoot the mother, and then the calf is easily secured. Frequently, the mother, in her dying agonies, lays hold of her young one with her teeth, and lacerates it so severely that it dies of its wounds.

If the increasing numbers of hunters and sportsmen were factors in the decline of the rhino population, the government was equally responsible for the annihilation of the animal. Baldwin mentioned a government 'reward of twenty rupees to anyone shooting a rhinoceros'.<sup>35</sup>

By the 19th century one-horned rhinoceros (*Genda, Gonda, Gor*) presence in India was well documented but their retreat from several parts of the country also came to be noticed in a wide number of writings. While we do not know the total numbers of rhinoceros killed in the 19th century, one such report claimed in 1868 that hunters killed 'no less than 200 rhinos in the Goma Doar'.<sup>36</sup> Some of these reports outlined a sense of the animal being on the verge of extinction; the rhinoceros 'will soon be exterminated'. Reporting their presence across 'Terai, and country between the Himalayas and the Ganges; from Rohilakund (Jerdon) in the west to Assam', William Lutley Scalater, the British zoologist and superintendent of the Indian museum in Calcutta reported that 'it was formerly plentiful in the Purneah district, but now seems to be almost confined to the Doars to the east of the Teesta River'.<sup>37</sup> Pollock during his many years of encounters with the rhinoceros in the foothills of the Himalayas and in the Brahmaputra Valley wrote how 'they are very plentiful in certain localities . . . the Terai, at the foot of the Bhootan range, and are also the swamps along the base of the Cossyah and Garrow Hills.' In 'Assam they inhabit the churs or islands in the bed of the Brahmapootra river'.<sup>38</sup>

The practice of hunting of rhinos was rampant in Assam and Bengal. Curzon himself shot numbers of rhinos in the early years in Assam and Nepal. In April 1901, Curzon wrote to his wife, then in England, about his total tally of trophies. 'Altogether twelve tigers were shot besides the rhinoceros and numbers of deer, boar, partridges and florican'.<sup>39</sup> In another time, his biographer informed, he chased and shot a rhino in an almost impenetrable jungle of pampas grass,

I saw the great brute dimly standing in a sort of tunnel that he had forced for himself through the bottom of the grass. He turned and fled. I fired a shot that caught him in the neck and sent him over like a rabbit. Then you never saw such a commotion. He kicked and

plunged, and we had to pour at least a dozen shots into him before he was finished off.<sup>40</sup>

Viceroy Lord Curzon again visited Assam in 1905, after the redrawing of the maps of Assam and Eastern Bengal, and he spent time hunting game. His 'inroad into one special rhino reserve (Kaziranga) resulted in a bag of only one cow rhino, where twenty years ago, in and around this same spot, fifty could be seen'.<sup>41</sup> Rules regarding big game were already coming in force but those rules were not meant for the Indian ruling elites.

Meanwhile, there was also some change in the attitude of the higher echelons of the British government in India. The most representative example was Lord Curzon himself. A skilled hunter, Curzon himself began to appreciate the need for the preservation of fauna. But he was careful not to overemphasise what he wanted to achieve. In 1901 Curzon was visited by the Burma Game Preserve Association, mostly consisting of Britishers. Curzon was on a visit to Burma. The association had drawn attention to the annihilation of the fauna. Curzon in return decided to speak at length on this subject through a public talk.<sup>42</sup>

Though big game rules were already in place, the increasing scarcity of big game including the rhinoceros still caused alarm. A popular British magazine on games and hunting, *Forest and Fauna*, wrote in 1909 that the danger to big game in Assam was still not over. 'The man that is doing all the damage and driving rhino and tiger from their old breeding places is the Nepali graziers [sic]'.<sup>43</sup> The journal bluntly and strongly accused the government of allowing the graziers to settle in return for payment of tax. The government 'allow these men [Nepali graziers] to bring in their large herds of buffalo at their own sweet will over every well-known breeding spot in Assam – grazing, and hacking down the best covers in the province'.

Sportsmen were still happy that there were places to hunt, but there were only a few places where the rhino could be hunted:

On the south bank of the Brahmaputra there are still a few breeding places left, but these are inaccessible till about April, after the jungle has been burnt off. The government reserve forests in these parts can hardly boast of a rhino inside the areas.

The chance of big game, including the rhinoceros, was still a matter of temptation for the prospective British tea planters in Assam even in the last quarter of the 19th century.<sup>44</sup> By the early 20th century on the south bank of the Brahmaputra the homes and feeding grounds of the rhino essentially remained limited to lower ranges at the foot of the 'Mekir and Garo Hills, in the low lying swamps and dollonies, covered with dense ekra and kagri, almost as thick as bamboos, growing [to] a height of from 15 to 20 feet, through which it is impossible to drive a hathi at the pace of a rhino'.

Despite the imposition of restrictions on rhino hunting, other areas, particularly the rhino-inhabited places on the north bank of the Brahmaputra, remained exposed to rhino hunting and the hunting continued. In 1905, as the prince and princess of Wales were preparing their visit to India, the *Sevenoaks Chronicle and Kentish Advertiser* excitedly reported the grand preparations for the tour and did not forget to mention that ‘it is not unlikely that the Prince may also be shown some rhinoceros shooting in Assam’.<sup>45</sup> Lord Minto, while visiting Assam in February 1909, shot one rhinoceros. The accompanying photographer, who happened to be the Viceroy’s military secretary, fractured his leg as the rhinoceros charged the elephant on which they were riding.<sup>46</sup> George V, soon after his coronation, arrived in India in 1911 and took a hunting expedition to Nepal where he shot eight rhinoceros.<sup>47</sup>

By the early years of the 20th century, the rhinoceros came to be found only in the Brahmaputra Valley and a little to the west of this. In 1903 the *Sevenoaks Chronicle and Kentish Advertiser*, while reporting the receipt of an ‘unusually fine specimen of the Indian rhinoceros’ in the Natural History Museum, which was endeavouring to get a specimen, also decided to mention that the animal ‘is now to be found only in a small part of the Assam jungle, in the Maharajah’s territory (Cooch Behar)’.<sup>48</sup>

Three decades later another British newspaper boldly asserted that ‘the Indian rhinoceros has been driven from various parts of India and is now found only in the jungles of the Assam plain and Nepal’. Even then the animal was still a rare one in Nepal and was considered as royal game and ‘its life is preserved by the severest laws’. Not only that, ‘the Natives who dare to shoot the Royal rhino of Nepal are liable to heavy fines, and in some cases the penalty is death’.<sup>49</sup>

Writing in 1921, E. P. Stebbing explained this extraordinary confinement of the rhinoceros to a limited geography: ‘The great opening out of the country, clearance of forests for tea gardens, cutting them up by roads and railways have restricted the area of untouched primeval forest which forms the natural habitat of this animal’.<sup>50</sup> In fact, in 1902, Francis Henry Skrine of the Indian Civil Service, while talking about the growth of the tea plantation in Dooars, showered heaps of praise on the tea plantation for forcing away the rhinoceros:

If the man deserves praise who makes two blades of grass flourish where one grew before, of what reward is he not worthy who has converted a haunt of the rhinoceros and wild elephant into the chosen home of a great English industry?<sup>51</sup>

In 1932, the South Kensington Museum displayed an exhibition of ‘game animals’ and commentators spoke out regarding how the exhibition ‘must be a revelation to people who do not realise how rapidly the creatures of the

wild are being extinguished'. C. W. Hobley, secretary of the Society for the Preservation of the Fauna of the Empire exemplified the case of the Indian one-horned rhinoceros, which met with a similar fate.<sup>52</sup> 'Take the case of the one-horned Indian rhinoceros, once so common in India that herds were said to be used in battle in medieval times. The merest remnant now survives in the forests of Assam, and in Nepal'. Hobley sounded the death alarm and took the case of extinction to the international audience, he was hopeful that 'inviolable sanctuaries' would be formed 'in Africa, India and elsewhere, so that the vanishing wild life of the Empire may find peace and multiply'. The wild animals should be 'objects of travellers, and not merely targets for marksmen – victims of men's avarice and women's vanity, and at the same time, without interfering with legitimate economic development'.

### Saving the rhino

By 1900 rhinos were found only in Nepal, Bengal and the floodplains of the Brahmaputra.<sup>53</sup> This happened due to a range of issues including disappearance of habitat and hunting.<sup>54</sup> The animal was not hunted and killed merely as a trophy. By the late 19th century Kaziranga was a planters' and other sportsmen's heaven. E. P. Gee, who had first-hand experience of the game reserve in its early days, wrote:

in 1886 a certain sportsman went out on elephant in the area, which is now Kaziranga to shoot rhino. He encountered one and fired about a dozen shots at it from a close range. The wounded rhino made off, and as it was too late in the evening the hunter returned to his camp. Next day he followed up the bloody trail of the badly wounded rhino and came across it while it was actually engaged in fighting and keeping off two tigers. One tiger, the account says, had his neck fearfully covered with blood. The sportsman fired at both the other tigers, which escaped, and then finished off the unfortunate rhino.

(Gee, 1952)

For hunters and poachers it was easier to follow the animal, as it left behind traces, and its horn was in great demand. The animal's horn was 'reputed throughout the East to possess aphrodisiac properties'.<sup>55</sup> Rumors about medicinal properties of the rhino horn had intensified its trade. E. P. Gee blamed this on the 'fanciful belief in the wonderful properties of its horn'.<sup>56</sup> The Javanese rhinoceros disappeared from Lower Burma by the late 19th century and this accentuated the pressure on the greater one-horned rhinoceros found in the floodplains of the Brahmaputra. The lucrative trade in rhino horn attracted the entry of merchant capital. Calcutta-based businessmen formed an organisation to make arrangements for the regular supply

of rhino horn and elephant tusks to Calcutta.<sup>57</sup> Milroy reported that local Bodos living in the neighbourhood of the Manas game sanctuaries had taken to poaching on a large scale.

As pressure on the rhinoceros increased in the last years of the 19th century, it sent alarm bells ringing.<sup>58</sup> One of the earliest pieces of official communication was authored by J. C. Arbuthnott, a senior official posted in Assam. Arbuthnott's official letter of 1902 to Assam's chief commissioner portrayed a very grim picture of the fate of the one-horned rhinoceros. He wrote, 'the animal which was formerly common in Assam, has been exterminated except in a very narrow tract of country between the Brahmaputra and Mikir Hills in Nowgong and Golaghat where a few individuals still exist'.<sup>59</sup> Arbuthnott made it abundantly clear that 'reckless and indiscriminate destruction of all game' was done by 'large shooting parties from Bengal'. What was required was an official order to stop 'destruction of rhinoceros in Assam by shooting or by pitfalls' unless one did not wish to witness the 'complete extinction of a comparatively harmless and most interesting creature'. While he did not make it clear who constituted these shooting parties, the tone of his letters tells us that they were the natives, not the Europeans who hunted this animal for trophy. Henry Cotton, Assam's most illustrious chief commissioner, did not disagree with his junior officer but noted his reservations against keeping vast tracts of land which might be taken up for expansion of agriculture. 'It would not be desirable that the formation of the reserve should prejudice the development of cultivation, but there must be extensive areas suitable as habitats for the rhinoceros which are quite unculturable', Cotton's secretary conveyed to Arbuthnott a month later.<sup>60</sup> Cotton was famously known for his zeal to bring thousands of miles of vast wasteland in the Brahmaputra Valley under cultivation.<sup>61</sup>

The hunting of the rhinoceros was already prohibited in Bengal. This helped Assam officials to fall back on the protocols to be followed if something similar had to be enacted in the province. The lead was taken by Assam's civil officials much before the Forest Department had anything to say on this matter. A few years of official correspondences finally paved the way for enacting the legal and bureaucratic mechanisms to ensure a space for the rhinoceros. Arbuthnott, with the help of several junior British officials, including Major P. R. T. Gurdon, who would shortly make a name for his contribution to the Assamese language and cultural history, identified three vast spaces with an aim to establish rhino asylums in the floodplains of the Brahmaputra. The parameter for selecting these areas was clear: they should not stand in the way of the expansion of agriculture in Assam. Gurdon thus selected the future Manas National Park: 'The whole area does not contain a single village, for people will not live there for fear of the Bhutias. The Kacharies have no rights in the proposed reserve, but they go up sometimes to fish and also to shoot'.<sup>62</sup>

Arbuthnott's next choice was the vast stretch of grasslands in the floodplains along the Brahmaputra. 'In Nowgong I recommend the formation of a reserve to the west of Laokhowa and north of Juria between the Leterijan and the Brahmaputra river and in the Golaghat subdivision of Sibsagar in the vicinity of Kaziranga'.<sup>63</sup> What did both these places look like? Though not completely free from human movement, Arbuthnott thought that he could very well demarcate 'at both places a suitable area of uncultivated and uncultivable waste, destitute of inhabitants . . . without prejudice to cultivation' as asylum for the rhinoceros. As these official correspondences were heading towards the intended goal, J. Bampfylde Fuller, Assam's chief commissioner also lamented that the Forest Department 'have not done apparently much towards affording an asylum to the wild fauna of the country'.<sup>64</sup> Fuller also thought that whatever sport rules existed in Assam were a dead letter. The Assam government moved fast to declare those areas as reserved forests with an additional aim to make them rhino asylums. However, it made it amply clear that declaration of such asylums should limit the 'amount of game to be shot', prohibit 'the shooting of immature animals or females', limit the 'number of elephants to be taken into the forest' and that a licenced shooter would be accompanied by 'a forest official'.

It is most likely that the local Assamese elite did not welcome this idea of preserving forest lands as exclusive sites for the rhinoceros. J. Donald, Deputy Commissioner of Sibsagar, spoke to a few such individuals. They were all 'acquainted with the tract, and have been shooting therein'. They all opined to Donald that 'the tract should certainly be reserved in order to prevent the extermination of the rhinoceros'.<sup>65</sup> There were scattered families 'north of Diftloo river and south of Mariahati Mirigaon' but Donald was of the opinion that those families could be easily relocated.<sup>66</sup>

The rhino asylum was born amidst a general cry for lost species such as lions and bison and also the imperial rulers' claim for privileged hunting practices.<sup>67</sup> The makers of Kaziranga, being essentially both foresters and revenue officials, paid little attention to the complex landscape and agrarian practices.<sup>68</sup> The fact that its landscape is formed by the complex of sprawling floodplain grasslands, numerous water bodies and woodlands that provide an ideal mix of habitats for a variety of flora and fauna was admitted by the Assam officials. The Assam government made the quickest choice by selecting a long strip of land – mostly covered with savannah grasses and swamps – that could be easily accessed by the Europeans.

These strips of land across both the banks of the Brahmaputra were part of the dynamic floodplain system. The continuous making and unmaking process was an essential feature of this landscape. When the 17th-century Mughal traveller Shihabuddin Talish travelled through the Brahmaputra, accompanying the Mughal commander Mirjhumla, he saw human settlements and a dense agrarian landscape in the larger areas where the park is presently located.<sup>69</sup> Subsequent to Shihabuddin's departure, the Brahmaputra

changed its course and large parts of these areas were transformed into swampy, low-lying lands, making it unfit for agriculture. In 1904 when J. Donald, deputy commissioner of Sibsagar, made local enquiries he had no doubt that the vast swampy areas of the Kaziranga could have been easily converted into cultivable land had there been some attention.

The land might be made fit for cultivation if the old embankment, constructed in the time of the Assam Rajas, were repaired, but this would prove an expensive undertaking, and in view of the fact that the country is infested by wild animals the question of repairing the embankment need hardly be considered.<sup>70</sup>

Maps drawn by British officials during the later decades of the 19th century had repeatedly noted Kaziranga. Most beels (small lakes) and other wild areas in and around Kaziranga were identified with names. Such names were probably given by the erstwhile villagers who frequented these places when they were either densely or thinly cultivated. These floodplains of the Brahmaputra were witness to many volatile geo-morphological transformations. The retreat of humans took place here as nature was an unwilling host leaving the wild animals to swim, graze and roam around the wilderness.

It took some time to remove doubts over rights of the villagers and resolve issues related to the restriction of shooting privileges of the Europeans in India. Bampfylde Fuller was particularly unwilling to make any announcement that was hostile to the Assamese *raiyats*. Categorical voices came from the pen of the revenue officials. One of their central concerns was to make a revenue surplus province. They could not afford to be seen as hostile to the idea of the expansion of cultivation, a field where the province had been doing badly. Assam's tea plantation had paid off handsomely but the province could still accommodate people and newer species of crops. Most officials posted in Assam were also aware of the floodplains' wilderness. These officials, many of whom had experience working in the Bengal delta, had come to accept these floodplains as predominantly characterised by transitory human settlement. This made them careful not to dismiss the absence of the permanent and thickly inhabited village as the only proof of sign of human control of these areas.

It took a few years more to finally promulgate Kaziranga as a game reserve in 1908.<sup>71</sup> This meant there were restrictions on the shooting of animals, especially the rhino. The game reserve probably helped slow the reckless killing of the animal but hunting and poaching did not stop. In February 1909, Colonel Victor Brooke, military secretary to Lord Minto, India's viceroy, shot at rhinoceros when Lord Minto paid a visit to Assam.<sup>72</sup> There was increasing international demand for the protection of wild animals and Assam, as the only place for the near-extinct rhinoceros, now drew international attention. P. Chalmers Mitchell, president of the zoological

section of the British Association stated that by the early 20th century the rhinoceros had been nearly exterminated from northern India and Assam.<sup>73</sup>

Until well into the mid-1930s poachers' camps were found at 'every bheel' and 'about forty carcasses of rhino with the horns removed' were noted by a forest officer who was deputed into the Kaziranga for survey.<sup>74</sup> Meanwhile, there was a sudden rise in rhino poaching in Assam in the 1930s. There was an increased international demand for rhino horns, often fetching the price of rupees 15 a tola.<sup>75</sup> Poaching had intensified in Assam. The government had sought the 'intervention of the troops of the Assam Rifles'.<sup>76</sup> Later conservationists believed that this armed intervention 'resulted in greatly slowing down rhino poaching and in more or less maintaining the position, at least within the reserves'.<sup>77</sup> At a moment when the rhinoceros were hardly at the forefront of governance, protection by rifles was a welcome move.

After about two decades, in 1926 the game reserve came to be known as a 'game sanctuary'. This meant that it still did not shy away from the social imagination of the trophy hunters who still considered this as a place for game. It was only towards the late 1940s that it came to be called a 'wildlife sanctuary' implying the inherent idea of all living creatures and their intended conservation.<sup>78</sup> Things have changed fast since then. Tourists slowly arrived but forest officials were never enthusiasts. Gee recalled an encounter with a British forest official who categorically told him that 'no one can enter the place. It is all swamps and leeches and even elephants cannot go'. Probably the British forest official was not wrong.

But the idea of game reserve did not win the sympathy of the neighbouring population, who were worried about crops being destroyed by the increasing numbers of animals. Neither humans nor animals had learnt the art of appreciation of each other's camaraderie. Only in 1924 villagers from the neighbourhood of the sanctuary wrote in a strongly worded petition to the Forest Department how thousands of villagers and their crops were being badly affected by the increase in wild animals. They wrote how animals from this game reserve had destroyed their crops and killed people. The villagers further appealed to the Forest Department to allow them to cultivate lands within the game reserve so that they could further push the boundaries of the wild animals away.<sup>79</sup> The villagers' uneasiness about the increasing population of wild animals however could not convince the Forest Department to think similarly.

The game sanctuary was opened to visitors in 1938. E. P. Gee was one of the first to come. Riding on an elephant, he saw rhinos who 'appeared to be most improbable-looking and prehistoric-like with their quaint features and thick armour plating'. It took another few decades for Kaziranga to gain attention. A few forest officials undertook significant steps to ensure that Kaziranga remained free from poachers. While many had probably worked tirelessly, the works of Mohi Chandra Miri, an assistant conservator of forests, and A. J. W. Milroy, conservator of forests in Assam in the

1930s, had crucial significance. Gee recognised Miri for clearing Kaziranga of pit-digging poachers.<sup>80</sup> The rhino also received the blessings of the Assam Legislative Council in the mid-1930s when the rhino horn was declared as forest produce.<sup>81</sup> This gave forest officials the right to seize rhino horns and provided a little respite to the rhino. However, things were still gloomy. Trade in the rhino horn was in full swing. Yet the physical well-being of the megafauna was ‘largely a matter of individual whim’. Milroy had little doubt that ‘encouraging results obtained by one Divisional Forest Officer are only too often dissipated during the regime of successor, who is indifferent to this side of his multifarious duties’.<sup>82</sup> Another contemporary observer squarely put the blame on the Indian junior officials: ‘poaching goes on extensively under the eyes of Indian subordinates who are supposed to look after them’.<sup>83</sup>

Meanwhile there were some dramatic transformations in the floodplains. This brought wild animals and man more into direct confrontation. By the early 20th century, these floodplains fast emerged as a site for buffalo grazing.<sup>84</sup> This commercial venture was supported by the local elite. The buffalo herders’ obvious choice was the riverine localities or the river islands of the Brahmaputra. These areas are famous for the growth of ‘enormous areas of grass and reeds’ and were most preferred by the megafauna. The large-scale growth of buffalo rearing came in direct confrontation with the habitat of the rhinos and other megafauna. Buffalo rearing had lost its economic and speculative power by the mid-20th century but not before producing a temporary setback to the idea of promised space for the rhinoceros. Meanwhile, habitats for megafauna decreased further. This additional pressure came simultaneously but differently. The central protagonist here was the jute crop. Jute was the most thriving agricultural crop in late-19th- and early-20th-century India. Beginning in 1860s Bengal, it had developed into a powerful mechanised industry which was ever ready to consume millions of bales of jute at regular intervals.<sup>85</sup> To fulfill the needs of this Bengal industry, by the early 20th century the crop began to be cultivated large-scale in the floodplains of the Brahmaputra.<sup>86</sup> The floodplains of the Brahmaputra were a great site for commercial agriculture by the mid-20th century. This had multiple consequences for the megafauna of which habitat shrinkage was the most crucial.

If the megafauna and peasant agriculture came into direct confrontation by the mid-20th century, there was more to it. The massive land resettlement programme that the British colonial government undertook since the 1890s with an aim to enhance land revenue received a jolt after the 1950s. After decades of uncertainties, the land revenue settlement process began only towards the last decades of the 19th century. It remained an unfinished task of the imperial government even in the early decades of the 20th century. Several factors assisted in making land settlement an incomplete process. The intimidating floodplain landscape, where one has to make a

careful choice in selecting lands for habitation and agriculture, and peasants' practices of mobility and freedom to reclaim lands continuously acted against the much-desired wish of the colonial government. Further, the colonial land settlement programme was embedded in the flexible features of the floodplains. This ensured that the land settlement could never be completed. Trouble occurred when this unfinished state initiative encountered the complex and combined challenges emanating from Assam's tea plantation and Forest Department. The later decades of the 19th century were a time for the consolidation of the British tea plantations in Assam.<sup>87</sup> Similarly, the rapidity and hurried manner in which the Assam government handed over lands to the Forest Department did not match with the increasing needs for agrarian expansion necessitated by the rapid population growth since the 20th century.<sup>88</sup> Estimates from the early 20th century indicate that both the Forest Department and the tea planters combined owned half of the valley's land. All these factors significantly restricted the mobility of the agrarian communities. The late 19th and early 20th centuries were also a time for the retreat of the animals in the Brahmaputra Valley. Multiple agencies, including the tea plantations, the mono-plantations protectively promoted by the Forest Department and rapid expansion of the jute cultivations massively fragmented the floodplain landscapes. With the fundamental redrawing of the landscape architecture, animals' habitats shrunk, their routes of migration were disrupted and they were confined to limited ranges. Traditional elephant 'corridors' were broken up, habitats of other large mammals were pushed back and smaller varieties were made to disappear. Elephant habitats (elephants being the most important source of power and revenue both for the pre-colonial and imperial government) were pushed to the eastern and southern frontiers of the valley, which were yet to be touched by the advent of modern capital. When the floodplains were reclaimed at an extraordinary speed for jute cultivation in the first half of the 20th century, animals had to retreat from the riverine areas and sandy river islands.<sup>89</sup>

### Science, rhinos and becoming a cultural heritage

Assam's cultural investment in the Kaziranga began only in the latter decades of the 20th century, but a similar project with the rhino preceded long before. Animals often occupied a significant place in Assam's political and cultural landscape. The finest illustration of this was the role played by the elephants in Assam's cultural and political history until at least the 19th century. The Ahom rulers jealously guarded their rights over the elephants from that of the Mughals. In the wake of aggressive British assertion to claim exclusive ownership of the elephants, the zamindars of Goalpara tried to retain their privileges in the last decades of the 19th century but they could hardly succeed.<sup>90</sup> Elephants acquired new political and cultural meanings through these histories of contestation and competing claims, but that

hardly matched with the tragic narratives associated with the life and times of the rhinoceros.

The rhinoceros offered something more in the second half of the 20th century. Two distinct developments began to shape the future of the rhinoceros: the political-cultural commodification of the rhinoceros as well as the slow arrival of the discourse of conservation science. As early as 1948 the Assam government, jealously guarding the linguistic and cultural uniqueness of the Assamese identity, declared the rhino as the state insignia. The Assam State Transport Corporation, the government-run public transport facility, incorporated the rhino as its emblem; its red and black buses proudly displayed the rhino insignia. The Assam government also gifted, donated or presented rhinoceros to zoos, foreign governments or natural museums; some of those were christened with names drawn from Assam's cultural heritage. A rhino baptised *Lachit Barphukan*, after the medieval Assamese military commander, was gifted to Bombay Zoo in 1952.<sup>91</sup> The National Zoological Park in Washington received its first one-horned rhinoceros in 1963. Several foreign nations also bought rhinos at a cost. In 1967 a rhino was priced Rs 1 lakh for foreign buyers.<sup>92</sup> Most rhinoceros had to overcome a strenuous long-distance journey and adjust to a new environ. Their story of survival became enigmatic and reaffirmed their unique position in the cultural history of fauna. Cultural reproduction and global circulation created an unusual profile of the rhinoceros in the second half of the 20th century. Since then many joined in the remaking of the cultural image of the animal; the state, naturalists, peasants, small entrepreneurs and lawmakers were all part of this effort.

Before the territorial limits of the Kaziranga become part of Assam's natural and cultural heritage, a number of naturalists began to reimagine the future of the rhinoceros in the late 1940s. At the request of the Assam government three naturalists made their maiden visit to the Kaziranga in 1949.<sup>93</sup> Two of these naturalists were stalwarts in their fields. They were S. Dillon Ripley, a young naturalist then teaching zoology at Yale University, and the well-known Indian ornithologist Salim Ali. After their short trip to KNP, they suggested to the government of Assam that the Kaziranga could be 'turned into a show place and field laboratory'.<sup>94</sup> This team of naturalists agreed that Assam's game sanctuaries were of great importance as these were vast stretches of space which was 'the very last refugees of the Great One-Horned Rhinoceros'. They however agreed that poaching still existed and much needed to be done to ensure the survival of the rhino. E. P. Gee rightly claimed that their report 'exposed the optimistic complacency which had hitherto prevailed concerning the rhino population'.<sup>95</sup> Ripley and Ali's report caught the imagination of the influential *Times of India*,<sup>96</sup> which published a long editorial on this report and what was to be learnt from it. There was little doubt that wild animals in this game sanctuary were still a source of threat; rhinos occasionally straying out of the sanctuary and

killing people continued to make international news.<sup>97</sup> In the 1940s a number of rhinos died of anthrax, an infection caused by bacteria. These deaths, while they did not cause any immediate alarm, would become a source of major concern in the near future. But there were competing claims about the number of rhinoceros after four decades of protection. Compared to the claims of a sizeable numbers of rhinoceros, Gee, much to the dismay of the Assam government, reported in 1950 that there were an estimated 150 rhinoceros in Kaziranga.

The Bombay Natural History Society's report was momentarily persuasive in drawing international attention to the condition of rhinoceros. The Scientific Conference on Resource Conservation and Utilisation of UNESCO held in 1949 urged the Assam government to take 'such steps . . . to protect and preserve the Great One-horned rhinoceros . . . especially in the Kaziranga Sanctuary which should be set aside as an inviolable rhinoceros sanctuary'.<sup>98</sup> A note prepared by Salim Ali, based on the BNHS's report, found a place in the proceedings of this crucial conference. Thus began the efforts to understand and study the rhinoceros.

This was, however, a time in which the idea of the threat of human and domestic animals posing a challenge to the existence of the rhinoceros came to become part of the Kaziranga governance narrative. S. Dillon Ripley and Salim Ali had only broadly hinted at the idea, but years later the idea of an inviolate Kaziranga became prominent. The occasion was the visit of Lee Merriam Talbot in 1959. Talbot was introduced by the *Times of India* as an unusual hunter who visited the park with 'weapons' consisting of a pen and pencil.<sup>99</sup> Writing in the leading conservation journal *Oryx*, Talbot, staff ecologist of the International Union of Conservation of Nature, reported the health danger posed by domestic animals to the rhinoceros. 'The main threat to the rhinos at Kaziranga', Talbot declared, 'is by domestic stock within the sanctuary boundaries'.<sup>100</sup> Talbot further explained that while the government allowed grazing 'on an area one mile deep and 3 miles long inside the edge of the sanctuary', this hardly worked. He lamented how 'the herds of buffalo and cattle are generally grazed free without supervision, it is extremely difficult to enforce those limits'. Forest officials and conservationists alike agreed that this had resulted in occasional deaths of rhinoceros and other fauna due to disease spread by domestic animals. Talbot argued that anthrax and rinderpest were the worst offenders. As the concept of sanitising the park from human influence towards the end of the 20th century, Talbot's idea would come handy for the later conservationists and managers of the park.

Back at home, beginning in the 1950s the Assamese elite and politicians across the ideological spectrum slowly began to extend support to the park. Gee indeed noticed 'signs of an increasing volume of public opinion in Assam . . . more interested in shooting with the camera'. Gee delightfully wrote how 'of late many speeches and broadcasts on Assam's wonderful

flora and fauna have emanated from important officials'.<sup>101</sup> As international conservation scientists regularly drew attention to the endangered condition of the rhinoceros in India, Assamese politicians responded by enacting legal mechanisms to ensure the further safety of the animal.<sup>102</sup> In the next decade extraordinary steps were taken to frame legal and executive mechanisms to give a new life to Kaziranga. But since then the local people also extended incredible social and political support to enhance the value of Kaziranga. People began to care about wild animals, which at one time were a nuisance and a cause of concern for raiding their crops. Despite this momentous new journey taken by the rhinoceros, little on the rhinoceros came to be portrayed in the otherwise politically assertive world of Assamese literature.

A game reserve and its eventual transformation to a national park in the 1970s and the associated conservation initiatives along with legal, financial and political programmes by the government helped save the rhino, proving that large animals including the rhino could be saved from hunters and others. By the last quarter of the 20th century the park slowly began to acquire significant brand value and international attention. Naturalists paid regular visits to the Kaziranga and their findings came to be presented in a wide range of global forums. Bill Burrad, the American TV host, made a short documentary on the Kaziranga titled 'From Kaziranga with Love', making it an international tourist destination. In the 1970s travel to the region was still restricted, requiring permits from the government of India. Thus, for instance, in 1970, the *New York Times* reported how the Assam government had made a few modern rest houses and a transport facility for tourists to see the 400 rhinos who were otherwise not hostile to humans. The 1970s witnessed moderate growth in the numbers of Indian and international visitors to the park, pushing it beyond the exclusive interests of the naturalists. The rich, the children of princely rulers and the elite would make occasional visits to the park. This pattern would continue for two more decades.

By this time there was rapid political and economic transformation in Assam. The political instability of the 1980s resulted in the fragile governance of the park. The rhinos in Kaziranga became part of an international network of medicinal trade and poaching of the rhinos became frequent. News of the indiscriminate killing of the rhinos in Kaziranga came to be covered in the international press. During this time of political restlessness, the rhinos of Kaziranga acted as additional armour for the Assamese. In 1982 the government of India proposed to move about 60 of the rhinos from the park to other parts of the country.<sup>103</sup> While the naturalists supported this move as ecologically justifiable, leaders of the Assam movement termed the proposed transfer an attempt by the central government to deprive the Assamese of a tourist attraction. Bhrihu Phukam, the fiery spokesman for Assamese leaders, claimed that any such plans were unacceptable as it was 'a conspiracy to deprive the people of Assam of an object of their pride and deprive the area of tourist revenue.' In February 1982, a

delegation of Assamese leaders who had been negotiating with Prime Minister Indira Gandhi on their demand for the identification and deportation of settlers from Bangladesh also requested that she bar the removal of any animals from Assam.

By the 1980s the park became an integral part of Assamese cultural and political power along with its increasing branding as a tourist destination. This undoubtedly enhanced the park's potential to generate economic opportunities. A few Assamese small entrepreneurs, for whom the space for trade and business was very limited, began to invest private capital and by the turn of the century a vibrant tourism business was in place, largely dominated by Assamese small entrepreneurs. An augmentation of its economic value thus benefitted a good number of small traders and peasant families. Rapid changes in the political economy of the park have prompted the birth of new management practices.

In the meantime, an overarching public discourse, shaped by the sense and sensibilities of the Assamese nationalist imagination, had transformed the park into a space where Assam could claim some political exclusivity. The desire to preserve KNP, well pronounced in the Assamese public life, is not essentially driven by a sense of recovery of a natural space, but more specifically due to its embodied economic and cultural value.

### **Competing rights: people, land and animals**

By the turn of the century there were three distinct layers of development around the life of the park: increasing entry of private capital, peasantisation of the floodplains and finally, renewed vulnerability of the rhinoceros to poaching due to its increasing demand in the international medicinal trade. In the latter decades of the 20th century there was an increased proliferation of trade in the rhino horn. Of the international rhino horn markets, Hong Kong, Aden and Yemen were major importers. Between 1949 and 1976, Hong Kong had been the major import market for rhino horns.<sup>104</sup> The Assam government also participated through a legal window in the rhino horn trade during this period. Between 1969 and 1979 the Assam Forest Department sold 210 kg of Indian rhino horn.<sup>105</sup> The increasing vulnerability of the rhinos intensified acrimonious public debates. These debates focused essentially on the competing rights of capital, animals and the peasant population. One line of argument strongly suggests that human influences in the park are now widely believed to be a dangerous evil. Public debate equally distances itself from the interconnected issues of nature and the human landscape, which shaped the past of Kaziranga.

With an increased animal population inside the park, the park authorities were forced to seek territorial expansion. The direction of this territorial expansion was based on a complicated understanding of ecology, bureaucratic conveniences and local political negotiations. While making this new

choice for territorial expansion, the park authorities repeated what their imperial predecessors had done: when the park was transformed into a state-owned space, very little was done to investigate and understand the nature of local practices with regard to the use and exploitation of natural resources. The local population's ideas about ecology, land and water use patterns and grazing practices were seldom recognised. The colonial government, while creating game reserves, denied rights to the local people, and this became the standard practice for successive governments.

As the process for land acquisition began, the ghost of the unfinished land settlement programme of the British colonial and post-independent era and the renewed process of peasantisation of 1970s and thereafter had come to haunt the government and the park authorities. For instance, those landholders, whose record of rights was documented in the official land registry, refused to cede their land. Their refusal to relinquish their rights over lands came to be seen by the government as a threat to the idea of conservation. For those whose land tenure rights were never recorded in the standard official land registry and remained fuzzy, displacement meant no compensation. These villagers demanded that their land tenures be first secured before the reclamation process began. While refusing to be rehabilitated or displaced and lamenting the loss of their access to the commons, they contested the undisturbed privilege of private capital and their profit-making activities.

The government's dilemma has emerged out of a range of complexities. First, after 1947 the mechanism and principles of land governance in Assam had never been freed from the ideological arithmetic of colonial bureaucracy. The governing technology of land in colonial Assam was driven by the ideas of ruthless exploitation of peasant labour and expansion of the agrarian frontier. Second, large stretches of 'unclassed state forests', an important component of the colonial forestry in Assam, remained over the years an ill-defined and fluid category. With the onset of the electoral politics since 1930s, after the promulgation of the Government of India Act of 1935, Assamese politicians and the revenue bureaucracy regularly negotiated with the unclassed state forests to meet the rising demands of the agrarian communities for land. Many of them might have lost their lands to river erosion or become victims of the credit-mortgage nexus. As the 20th century progressed and as this category of forests lost its economic importance for the state forestry programme, the Forest Department began to disown and abdicate their ownership; these spaces became new geographies of peasantisation in Assam. In the 1970s, agrarian expansion into these legally forested spaces reached a significant momentum. The Forest Department feebly defended its territorial jurisdiction but this could not stop the march toward peasantisation. By 1980, armed with the Forest (Conservation) Act of 1980, the Forest Department reasserted its proprietorship over these unclassed state forests.

The public debates that shape the modern journey of Kaziranga hardly look at its complex evolution and the larger world of governance of nature in Assam. The present war of words is practically a battle against Assam's agrarian past. Legal battles are fought using 19th-century land revenue and forest laws, which were written to maximise political and economic benefits to the British Empire but failed to resolve critical issues. These laws are not equipped to accommodate the worries of the ecologically devastated Assamese peasantry and that of the Assam's crucial floodplain's fluid environment. Over the years KNP has become an abstract environment, ignoring the vibrant everyday agrarian life around the park. The complex legal and conservation debates also refuse to take cognizance of the domesticated agrarian landscape. But this chapter argues that such an idea of an impeccable natural space, free from all human interaction and influences, will find little root in environmental pasts.

### Notes

- 1 'The politics of cleaning up Kaziranga', *Indian Express*, 27 September 2016.
- 2 <http://ghconline.gov.in/Judgment/PIL662012.pdf> [accessed 20 October 2017].
- 3 Ibid.
- 4 'Rhino protection a poll issue in Assam but only symbolically', *Hindustan Times*, 7 April 2016.
- 5 For an insight into the ecology and habitat of the great one-horned rhinoceros, see, E. Dinerstein, *Return of the Unicorns: Natural History and Conservation of the Greater-One Horned Rhinoceros*, New York: Columbia University Press, 2003.
- 6 P. C. Choudhury (ed.), *Hastividyarnava*, Guwahati: Assam Publication Board, 1976.
- 7 T. C. Bhattacharjee (ed.), *Ghora Nidan*, Shillong: Assam Government Press, 1932. Bhattacharjee emphatically noted that this work was 'a product of experience acquired independently in Assam with reference to horses trained and domiciled in the land'.
- 8 For details see Maheswar Neog, *Socio-Political Events in Assam Leading to the Militancy of the Māyāmarīyā Vaiṣṇavas*, Calcutta: K.P. Bagchi, 1982.
- 9 See, Ambika Aiyadurai, "'Tigers are our brothers": Understanding human-nature relations in the Mishmi Hills, Northeast India', *Conservation and Society*, vol. 14, no. 4, 2016, pp. 305–316.
- 10 Arupjyoti Saikia, 'The Kaziranga National Park: Dynamics of social and political history', *Conservation and Society*, vol. 7, no. 2, 2009, pp. 113–129.
- 11 Ibid.
- 12 R. S. S. Baden-Powell, *Pig Sticking and Hog Hunting: A Complete Account for Sports Men and Others*, London: Harrison & Sons, 1889, p. 145.
- 13 John Butler, *Travels and Adventures in the Province of Assam, During a Residence of Fourteen Years*, London: Smith, Elder and Co., 1856.
- 14 Ibid.
- 15 T. T. Cooper, *The Mishmee Hills*, London: Henry S. King, 1873, p. 63.
- 16 John Butler, *A Sketch of Assam: With Some Account of the Hill Tribes*, London: Smith, Elder and Co., 1847, p. 27.
- 17 A. H. Meysey Thompson, 'A trip to India', *The Leeds Mercury*, 2 February 1899.

- 18 Vivek Menon, *Under Siege: Poaching and Protection of Greater One-Horned Rhinoceroses in India*, Cambridge: Traffic International, 1996, p. 2.
- 19 L. C. Rookmaaker, *The Rhinoceros in Captivity: A List of 2439 Rhinoceroses Kept from Roman times to 1994*, The Hague: SPB Academic Publishing, 1998, pp. 78–79.
- 20 Mahesh Rangarajan, *India's Wildlife History: An Introduction*, New Delhi: Oxford University Press, 2005, p. 14; Edwin T. Atkinson, *Statistical, Descriptive and Historical Account of the North-Western Provinces of India*, vol. 4, Part I: Agra Division, Allahabad: North-Western Provinces Government Press, p. xiii.
- 21 See, for instance, Thomas Claverhill Jerdon, *The Mammals of India: A Natural History of All the Animals Known to Inhabit Continental India*, Roorkee: Thompson College Press, 1867.
- 22 John McClelland, 'A list of Mammalia and birds collected in Assam', in *Annals and Magazine of Natural History: Zoology, Botany, and Geology*, vol. 6, London: R. and J. E. Taylor, 1841, pp. 366–374.
- 23 'Notes of a pleasure tour in India: No VIII-Assam', *The Glasgow Herald*, 17 August 1885.
- 24 *Royal Cornwall Gazette*, 10 May 1844.
- 25 Martin Montgomery, *The History, Antiquity, Topography, and Statistics of Eastern India, Vol. III: Puraniya, Ranggopoor, and Assam*, London: W.H. Allen & Co., 1838, p. 574.
- 26 George M. Barker, *A Tea Planter's Life in Assam*, Calcutta: Thacker, Spink & Co., 1884, p. 211.
- 27 Butler, *A Sketch of Assam*, p. 29.
- 28 Ibid.
- 29 Ibid.
- 30 Nripendra Narayan Bhupa and Maharajah of Cooch Behar, *Thirty-Seven Years of Big Game Shooting in Cooch Behar the Duars, and Assam: A Rough Diary*, Bombay: Times Press, 1908.
- 31 *The Hampshire Advertiser Country Newspaper*, 9 April 1999.
- 32 'The colonial and India exhibition', *Nottinghamshire Guardian*, 28 May 1886.
- 33 *The Lancashire Daily Post*, 29 December 1902.
- 34 Gray noted that the rhino horn fetched as much as Rs 80 to Rs 100 per seer. J. Errol Gray, 'Diary of a journey to the Borkhamti and the sources of the Irrawaddy, 1893', in *Government of India Foreign Affairs Proceedings*, May 1894, Nos. 7–15 (Elwin, Verrier, ed.), 1959. *India's North-East frontier in the nineteenth century*. London: Oxford University Press, p. 423.
- 35 J. H. Baldwin, *The Large and Small Game of Bengal and the North-Western Provinces of India*, 2nd ed., London: Henry S. King and Co., 1877.
- 36 Quoted in E. Blyth, 'Asiatic rhinoceroses', *The Zoologist*, June 1872, vol. 7, second series, p. 3108.
- 37 W. L. Scalater, 'Rhinoceros', *Catalogue of Mammalia in the Indian Museum*, vol. 2, 1891, p. 202.
- 38 Pollock, F.T., 1879, *Sports in British Burma, Assam, and the Cossyah and Jyntiah Hills, with notes of sport in the billy districts of the northern division, Madras Presidency, indicating the best localities in those countries for sport, with natural history notes, illustrations of the people, scenery, and game, together with maps to guide the traveller or sportsman, and hints on weapons, fishing-tackle, etc., best suited for killing game met with in those provinces*, vol.1, London: Chapman and Hill. p. 94.
- 39 Earl of Ronaldshay. *The Life of Lord Curzon, Being the Authorized Biography of George Nathaniel Marquess Curzon of Kedleston, K.G.*, vol. 2, London: Ernest Benn Ltd., 1928, p. 168.

- 40 Ibid.
- 41 'The game preserves of Assam', *Forest and Stream*, 1910, pp. 1036–1037.
- 42 R. Mukherjee (ed.), 'Game preservation in India', *Lord Curzon*.
- 43 'The game preserves of Assam'.
- 44 M. Gordon Stables, *Tea, the Drink of Pleasure and Health*, London: Field and Tuer, Leadenhall Press, 1883.
- 45 *Sevenoaks Chronicle and Kentish Advertiser*, April 21, 1905.
- 46 'Adventure of viceroy's military secretary', *The Scotsman*, 24 February 1909.
- 47 Jack B. Watson, *Empire to Commonwealth, 1919 to 1970*, London: J. M. Dent & Sons, 1971, p. 1.
- 48 *Sevenoaks Chronicle and Kentish Advertiser*, 13 February 1903.
- 49 *Nottingham Evening Post*, 15 September 1933.
- 50 E. P. Stebbing, 'Big-game shooting in India', *The Scotsman*, 24 December 1921.
- 51 Francis Henry Skrine, 'Bengal: The land and its people', *Dundee Evening Telegraph*, 28 January 1902.
- 52 'Vanishing creatures of the wild: Unless protected, many species of animals will become extinct', *Edinburgh Evening News*, 5 July 1932.
- 53 Gee, E.P. 1952. The great Indian one-horned Rhinoceros. *Oryx* 1(5): 224–227.
- 54 Vivek Menon, 'A problem with pachyderms', *Seminar*, no. 466, 1998, p. 47.
- 55 A. J. W. Milroy, 'The preservation of wild life in India, no. 3 Assam', *Journal of the Bombay Natural History Society*, vol. 37, no. 1, Supplement, 1934, pp. 97–104.
- 56 Gee, 'The Rhino in Kaziranga', p. 214.
- 57 Milroy, 'The preservation of wild life in India', p. 99.
- 58 This and the following sections, if not mentioned otherwise, are based on previous published work, Saikia, 'The Kaziranga National Park'.
- 59 Letter from J. C. Arbuthnott, Officiating Commissioner of the Assam Valley Districts to the Secretary to Chief Commissioner of Assam, 4 November 1902, no. 2409 G, Gauhati in Assam Secretariat Proceedings, Revenue A, September 1905, nos. 75–134 (Assam State Archives, hereafter ASA).
- 60 Letter from Secretary to the Chief Commissioner of Assam to J. C. Arbuthnott, Deputy Secretary, Sylhet, no. 2160 Misc, 9628 G Shillong, 18 December 1902, no. 76 in Assam Secretariat Proceedings, Revenue A, September 1905, nos. 75–134 (ASA).
- 61 Colonisation of Wastelands in Assam, Revenue A, November 1898, File nos. 128–138 (ASA).
- 62 Quoted in Letter from J.C. Arbuthnott to Secretary to the Chief Commissioner of Assam, 28 August 1903, Jowai, no. 77 in Assam Secretariat Proceedings, Revenue A, September 1905, nos. 75–134 (ASA).
- 63 Ibid.
- 64 Letter from F. J. Monahan, Secretary to the Chief Commissioner of Assam to the Commissioner of the Assam Valley Districts, no. 12 Forests, 1283 R, Shillong, 15 March 1904, in Assam Secretariat Proceedings, Revenue A, September 1905, nos. 75–134 (ASA).
- 65 Letter from J. Donald, Deputy Commissioner of Sibsagar to the Commissioner of the Assam Valley Districts, no. 409 R, Sibsagar, 4 June 1904 in Assam Secretariat Proceedings, Revenue A, September 1905, nos. 75–134 (ASA).
- 66 Ibid.
- 67 For a fuller understanding of the American Bison story, see Andrew C. Isenberg, *The Destruction of the Bison: An Environmental History, 1750–1920*, Cambridge: Cambridge University Press, 2000.
- 68 Saikia, 'The Kaziranga National Park'.
- 69 H. Blochmann, Koch Bihar, Koch Hajo, and Asam in the 16th and 17th centuries, according to the Akbarnamah, the Padishahnamah, and the Fathiyah i Ibriyah, *Journal of Asiatic Society of Bengal*, 1872, vol. 41, no. 1, p. 76

- 70 Letter from J. Donald, Deputy Commissioner of Sibsagar to the Commissioner of the Assam Valley Districts, no. 409 R, Sibsagar, 4 June 1904 in Assam Secretariat Proceedings, Revenue A, September 1905, nos. 75–134 (ASA).
- 71 Saikia, 'The Kaziranga National Park'.
- 72 'Lord Minto's tour', *The Times*, 24 February 1909, p. 5.
- 73 *The Times*, 6 September 1912, p. 3.
- 74 Gee, 'The rhino of Kaziranga', p. 216.
- 75 Rangarajan, *India's Wildlife History*, p. 57.
- 76 Lee Meeriam Talbot, 'A report on some animals of the middle east and southern Asia which are threatened with extermination', *Oryx*, vol. 5, nos. 4–5, May 1960, pp. 155–293, 190.
- 77 Ibid.
- 78 Gee, 'The rhino of Kaziranga', p. 216.
- 79 Assam State Archives, 'Petition to keep from miles of the Kaziranga Reserve open from the boundary line near the villages', Assam Secretariat Revenue proceedings, Revenue and Forests B, nos. 120–128, 1925 (ASA).
- 80 E. P. Gee, 'The most famous Rhino', *Natural History*, vol. 63, 1954, pp. 366–369.
- 81 Milroy, 'The preservation of wild life in India'.
- 82 Ibid., p. 98.
- 83 H. S. Wood, *Glimpses of the Wild: An Observer's Notes and Anecdotes on the Wild Life of Assam*, London: H.F. & G. Witherby, 1936, p. 115 (Wood was a civil surgeon in Assam).
- 84 For an understanding of the growth of Nepali milk producers in the first decades of the 20th century, see Lopita Nath, 'Migration, insecurity and identity: The Nepali dairymen in India's Northeast', *Asian Ethnicity*, vol. 7, no. 2, 2006, pp. 129–148.
- 85 For Bengal jute industry, see Tariq Omar Ali, *The Envelope of Global Trade: The Political Economy and Intellectual History of Jute in the Bengal Delta, 1850s to 1950s*, unpublished doctoral dissertation, Harvard University, 2012.
- 86 Arupjyoti Saikia, 'Jute in the Brahmaputra Valley: The making of flood control in twentieth-century Assam', *Modern Asian Studies*, vol. 49, no. 5, September 2015, pp. 1405–1441.
- 87 For an overview of the Assam tea plantations, see Rana P. Behal, *A Century of Servitude: Political Economy of Tea Plantations in Colonial Assam*, New Delhi: Tulika, 2014.
- 88 Arupjyoti Saikia, *Forests and Ecological History of Assam*, New Delhi: Oxford University Press, 2011.
- 89 Saikia, 'Jute in the Brahmaputra Valley'.
- 90 Arupjyoti Saikia, *Elephants, Zamindars and State: History of Contested Hunting Rights in Western Assam*, seminar paper presented at SOAS 2016 Elephant Conference, Indian Institute of Science, April, 2016.
- 91 'Seclusion for rhino', *Times of India*, 17 April 1952. A rhino was gifted to Periyar Sanctuary in Kerala in 1952. *Times of India*, 21 January 1957.
- 92 *Times of India*, 26 April 1967.
- 93 E. P. Gee, 'Wild life reserves in India: Assam', *Journal of the Bombay Natural History Society*, vol. 49, no. 1, April 1950, pp. 81–89.
- 94 'Survey of wild life in Assam: Experts' report', *Times of India*, 29 July 1949.
- 95 Gee, 'Wild life reserves in India'.
- 96 'Wild life', *The Times of India*, 6 August 1949.
- 97 In 1958 the *New York Times* reported that two people were killed by rhinos coming out of the park. Such stray animals were guarded back to the sanctuary without harming them. 'Indian rhinoceros kills two', *The New York Times*, 10 November 1957, p. 137.

- 98 Gee, 'Wild life reserves in India', p. 84.
- 99 Emile C. Schurmacher, 'He risks his life stalking world's rarest animals', *Times of India*, 12 July 1959.
- 100 Talbot, 'A report on some animals of the middle east and southern Asia'.
- 101 Gee, 'Wild life reserves in India', p. 88.
- 102 Saikia, 'The Kaziranga National Park'.
- 103 S. Gupta, 'Assam anger to move to shift rhinos', *The Indian Express*, 21 April 1982.
- 104 I. S. C. Parker and Esmond Bradley Martin, 'Trade in African rhino horn', *Oryx*, vol. XV, no. 2, November 1979, p. 157.
- 105 Esmond Bradley Martin, *Rhino Exploitation: The Trade in Rhino Products in India, Indonesia, Malaysia, Burma, Japan and South Korea*, Hong Kong: World Wildlife Fund, 1983, pp. 35–36.

## References

- A Rhino was Gifted to Periyar Sanctuary in Kerala in 1952. (1957, January 21). *Times of India*.
- Adventure of Viceroy's Military Secretary. (1909, February 24). *The Scotsman*.
- Aiyadurai, Ambika. (2016). Tigers Are Our Brothers: Understanding Human-Nature Relations in the Mishmi Hills, Northeast India. *Conservation and Society*, 14(4), 305–316.
- Anonymous. (1910). The Game Preserves of Assam. *Forest and Stream*. July 16, pp. 117–118.
- Assam State Archives. (1925). *Petition to Keep from Miles of the Kaziranga Reserve Open from the Boundary Line Near the Villages*. Assam Secretariat Revenue Proceedings, Revenue and Forests B, Nos. 120–128 (ASA).
- Atkinson, Edwin T. (1876). *Statistical, Descriptive and Historical Account of the North-Western Provinces of India* (Vol. 4). Part I: Agra Division. Allahabad: North-Western Provinces Government Press.
- Baden-Powell, R. S. S. (1889). *Pig Sticking and Hog Hunting: A Complete Account for Sports Men and Others*. London: Harrison & Sons.
- Baldwin, J. H. (1877). *The Large and Small Game of Bengal and the North-Western Provinces of India* (2nd ed.). London: Henry S. King and Co.
- Barker, George M. (1884). *A Tea Planter's Life in Assam*. Calcutta: Thacker, Spink & Co.
- Behal, Rana P. (2014). *A Century of Servitude: Political Economy of Tea Plantations in Colonial Assam*. New Delhi: Tulika.
- Bhattacharjee, T. C. (Ed.). (1932). *Ghora Nidan*. Shillong: Assam Government Press.
- Bhupa, Nripendra Narayan. (1908). *Maharajah of Cooch Behar, Thirty-Seven Years of Big Game Shooting in Cooch Behar the Duars, and Assam: A Rough Diary*. Bombay: Times Press.
- British Association, 'The Preservation of Wild Animals' (1912, September 6), p. 3.
- Blyth, E. (1972). Asiatic Rhinoceroses. *The Zoologist*, 7(2), 3108.
- Blochmann, H., Koch Bihar, Koch Hajo, and Asam in the 16th and 17th centuries, according to the Akbarnamah, the Padishahnamah, and the Fathiyah i Ibriyah, *Journal of Asiatic Society of Bengal*, 1872, vol. 41, no. 1, p. 49–101.
- Butler, John. (1847). *A Sketch of Assam: With Some Account of the Hill Tribes*. London: Smith, Elder & Co.

- Butler, John. (1856). *Travels and Adventures in the Province of Assam, During a Residence of Fourteen Years*. London: Smith, Elder and Co.
- Choudhury, P. C. (Ed.). (1976). *Hastividyarnava*. Guwahati: Assam Publication Board.
- Cooper, T. T. (1873). *The Mishmee Hills*. London: Henry S. King.
- Dinerstein, E. (2003). *Return of the Unicorns: Natural History and Conservation of the Greater-One Horned Rhinoceros*. New York: Columbia University Press.
- Earl of Ronaldshay. (1928). *The Life of Lord Curzon, Being the Authorized Biography of George Nathaniel Marquess Curzon of Kedleston, K.G.* (Vol. 2). London: Ernest Benn Ltd.
- G, Gauhati in Assam Secretariat Proceedings, Revenue A, September 1905, Nos. 75–134 (ASA).
- Gee, E. P. (1950). Wild Life Reserves in India: Assam. *Journal of the Bombay Natural History Society*, 49(1), 81–89.
- Gee, E. P. (1954). The Most Famous Rhino. *Natural History*, 63, 366–369.
- Government of Assam, Colonisation of Wastelands in Assam Secretariat Proceedings, Revenue A, November 1898, File Nos. 128–138 (Assam State Archives, hereafter ASA).
- Gray, J. Errol. (1893). Diary of a journey to the Borkhamti and the sources of the Irrawaddy, 1893, in *Government of India Foreign Affairs Proceedings*, May 1894, Nos. 7–15 (Elwin, Verrier, ed.), 1959. *India's North-East frontier in the nineteenth century*. London: Oxford University Press, p. 423.
- Greater Britain, Chronicle and Kentish Advertiser* (1903, February 13), p. 2.
- Gupta, S. (1982, April 21). Assam Anger to Move to Shift Rhinos. *The Indian Express*.
- Indian Rhinoceros Kills Two. (1957, November 10). *The New York Times*, p. 137.
- Isenberg, Andrew C. (2000). *The Destruction of the Bison: An Environmental History, 1750–1920*. Cambridge: Cambridge University Press.
- Jerdon, Thomas Claverhill. (1867). *The Mammals of India: A Natural History of All the Animals Known to Inhabit Continental India*. Roorkee: Thompson College Press.
- Letter from J. C. Arbuthnott, Officiating Commissioner of the Assam Valley Districts to the Secretary to Chief Commissioner of Assam, November 4, 1902, No. 2409.
- Letter from Secretary to the Chief Commissioner of Assam to J. C. Arbuthnott, Deputy Secretary, Sylhet, No. 2160 Misc, 9628 G, Shillong, December 18, 1902, No. 76 in Assam Secretariat Proceedings, Revenue A, September 1905, Nos. 75–134 (ASA).
- Letter from J. C. Arbuthnott to Secretary to the Chief Commissioner of Assam, August 28, 1903, Jowai, No. 77 in Assam Secretariat Proceedings, Revenue A, September 1905, Nos. 75–134 (ASA).
- Letter from F. J. Monahan, Secretary to the CC, Assam to the Commissioner of the Assam Valley Districts, No. 12 Forests, 1283 R, Shillong, March 15, 1904 in Assam Secretariat Proceedings, Revenue A, September 1905, Nos. 75–134 (ASA).
- Letter from J. Donald, Deputy Commissioner of Sibsagar to the Commissioner of the Assam Valley Districts, No. 409 R, Sibsagar, June 4, 1904 in Assam Secretariat Proceedings, Revenue A, September 1905, Nos. 75–134 (ASA).

- Lord Minto's Tour. (1909, February 24). *The Times*, p. 5.
- Martin, Esmond Bradley. (1983). *Rhino Exploitation: The Trade in Rhino Products in India, Indonesia, Malaysia, Burma, Japan and South Korea*. Hong Kong: World Wildlife Fund.
- McClelland, John. (1841). A List of Mammalia and Birds Collected in Assam. In *Annals and Magazine of Natural History: Zoology, Botany, and Geology* (Vol. 6). London: R. and J. E. Taylor.
- Menon, Vivek. (1996). *Under Siege: Poaching and Protection of Greater One-Horned Rhinoceroses in India*. Cambridge: Traffic International.
- Menon, Vivek. (1998). *A Problem with Pachyderms*. Seminar, No. 466.
- Milroy, A. J. W. (1934). The Preservation of Wild Life in India, No. 3 Assam. *Journal of the Bombay Natural History Society*, 37(1), 97–104.
- Montgomery, Martin. (1838). *The History, Antiquity, Topography, and Statistics of Eastern India, Vol. III: Puraniya, Ranggopoor, and Assam*. London: W. H. Allen & Co.
- Mukherjee, R. (Ed.). Game Preservation in India. *The Great Speeches of Modern India*, Delhi: Randon House, 2007.
- Nath, Lopita. (2006). Migration, Insecurity and Identity: The Nepali Dairywomen in India's Northeast. *Asian Ethnicity*, 7(2), 129–148.
- Neog, Maheswar. (1982). *Socio-Political Events in Assam Leading to the Militancy of the Māyāmariyā Vaiṣṇavas*. Calcutta: K. P. Bagchi.
- Notes of a Pleasure Tour in India: No VIII-Assam. (1885, August 17). *The Glasgow Herald*.
- Nottingham Evening Post* (1933, September 15).
- Parker, I. S. C. and Martin, Esmond Bradley. (1979). Trade in African Rhino Horn. *Oryx*, 15(2), 157.
- Prince of Wels's India Tour, Chronicle and Kentish Advertiser* (1905, April 21), p. 6.
- Rangarajan, Mahesh. (2005). *India's Wildlife History: An Introduction*. New Delhi: Oxford University Press.
- Rhino Protection a Poll Issue in Assam but Only Symbolically. (2016, April 7). *Hindustan Times*.
- Rookmaaker, L. C. (1998). *The Rhinoceros in Captivity: A List of 2439 Rhinoceroses Kept from Roman Times to 1994*, The Hague: SPB Academic Publishing.
- Royal Cornwall Gazette* (1844, May 10).
- Saikia, Arupjyoti. (2009). The Kaziranga National Park: Dynamics of Social and Political History. *Conservation and Society*, 7(2), 113–129.
- Saikia, Arupjyoti. (2011). *Forests and Ecological History of Assam*. New Delhi: Oxford University Press.
- Saikia, Arupjyoti. (2015). Jute in the Brahmaputra Valley: The Making of Flood Control in Twentieth-Century Assam. *Modern Asian Studies*, 49(5), 1405–1441.
- Saikia, Arupjyoti. (April 2016). *Elephants, Zamindars and State: History of Contested Hunting Rights in Western Assam*, seminar paper presented at SOAS, 2016 Elephant Conference, Indian Institute of Science.
- Seclusion for Rhino. (1952, April 17). *Times of India*.
- Scalater, W. L. (1891). Rhinoceros. *Catalogue of Mammalia in the Indian Museum*, 2.
- Schurmacher, Emile C. (1959, July 12). He Risks His Life Stalking World's Rarest Animals. *Times of India*.
- Skrine, Francis Henry. (1902, January 28). Bengal: The Land and Its People. *Dundee Evening Telegraph*.

- Stables, M. Gordon. (1883). *Tea, the Drink of Pleasure and Health*. London: Field and Tuer, Leadenhall Press.
- Stebbing, E. P. (1921, December 24). Big-Game Shooting in India. *The Scotsman*.
- Survey of Wild Life in Assam: Experts' Report. (1949, July 29). *Times of India*.
- Talbot, Lee Meeriam. (1960). A Report on Some Animals of the Middle East and Southern Asia Which Are Threatened with Extermination. *Oryx*, 5(4-5), 155-293.
- Tariq Omar, Ali. (2012). *The Envelope of Global Trade: The Political Economy and Intellectual History of Jute in the Bengal Delta, 1850s to 1950s* (Unpublished Doctoral Dissertation). Harvard University.
- Times of India* Assam rhino price increased (1967, April 26).
- The Colonial and India Exhibition. (1886, May 28). *Nottinghamshire Guardian*.
- The Hampshire Advertiser Country Newspaper* (1999, April 9).
- The Lancashire Daily Post* (1902, December 29).
- The Politics of Cleaning Up Kaziranga. (2016, September 27). *Indian Express*.
- Thompson, A. H. Meysey. (1899, February 2). A Trip to India. *The Leeds Mercury*.
- Vanishing Creatures of the Wild: Unless Protected, Many Species of Animals Will Become Extinct. (1932, July 5). *Edinburgh Evening News*.
- Watson, Jack B. (1971). *Empire to Commonwealth – 1919 to 1970*. London: J. M. Dent & Sons.
- Wild Life. (1949, August 6). *The Times of India*. <http://ghconline.gov.in/Judgment/PIL662012.pdf> [accessed October 20, 2017].
- Wood, H. S. (1936). *Glimpses of the Wild: An Observer's Notes and Anecdotes on the Wild Life of Assam*. London: H. F. & G. Witherby.