

## The Kaziranga National Park: Dynamics of Social and Political History

Arupjyoti Saikia

Associate Professor in History, Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati, Guwahati, Assam, 781 039, India

E-mail: arupjyotisaikia@gmail.com

### Abstract

Almost after a century of experimenting, Kaziranga National Park is now a well-known example of the success of wildlife conservation. Conservationists have no hesitation in ascribing the success of this story to the careful application of the science of wildlife conservation. A large section of the Assamese middle class would like to associate the institution as organic to their success story. For the state too it is a matter of pride. This journey of success is not a linear growth of success and a re-look into the social and political history of this national park will help us understand the complexities underlying these claims. The ideological paradigms of wildlife conservation in Kaziranga National Park have changed significantly over a long period. Since its establishment as a game sanctuary in the early twentieth century and gradually being given the status of a national park, Kaziranga has experienced varied forms of conservation agenda. Rather than a mere technological explanation for the success of the conservation project of Kaziranga, more of it was based on the social and political history.

**Keywords:** Kaziranga, game sanctuary, rhino, agrarian practices, traditional hunting, nationalism, Assam

**DOI:** 10.4103/0972-4923.58643

### INTRODUCTION

By the early twentieth century, in the wake of aggressive industrialisation, the idea of a national park as a space for public recreation and preservation of fauna had firmly taken shape and became one of the central concerns of the modern nation-state. Sites for national parks were not necessarily the embodiment of nature or wildlife, but spectacular landscape scenery acted as the primary focus.<sup>1</sup> The leading role was played by the US in shaping early ideologies of the national park. The Indian context, however, began strikingly in a different ideological paradigm. Wildlife historian Mahesh Rangarajan has reminded us that sport in British India had to be placed in the context of the evolution of the privileged access to game within Britain (Rangarajan 1996:154). Sport symbolized specific kinds of hunting, which was characterized by the purpose, techniques and the identity of the hunter. 'Hunting for sport was not only a form of amusement for the British, but also affirmed their status as racially distinct and close knit elite' (Conservation Foundation 1972). For instance skill over game and hunting was regarded as an added qualification for the Indian civil services officials. They made a constant endeavour to build their skills in game hunting. Hunting, also a part of the

'militarised life style', not only reinforced a sense of superiority over Indians, but also imbued a distinct set of class values. Many believed that sport, as a 'masculine' game, maintained the physical fitness of the hunter and helped in developing qualities of leadership (Webber 1902:317-18). Participation in a game would uphold the moral temperament of the Europeans away from their family and home. Among the Indians, many from the ruling princely families participated and specialised in hunting as a sport. Unlike their European counterparts game was one form through which these families negotiated social relations with the elite Europeans. An illustrative example is that of the princely rulers of Kochbihar, who played a key role in familiarizing many European sportsmen with the local fauna. There was a gradual shift from the game to fauna preservation only since the second quarter of the previous century. From a privileged access, the larger well-being of wild animals generally became a matter of concern for the managers of game reserves. Maybe is safe now to claim that the game reserves and sanctuaries were the products of the early twentieth century colonial understanding of Indian fauna and the international fauna preservation movement.

The Kaziranga National Park (KNP), now a well-known narrative in the Indian conservation history, began in this

context. However, the complex journey that the park had undertaken often disappears in the official narrative of its origin as well as its subsequent journey. The KNP, because of its centrality in the conservation history of the region, has been exposed to a wide variety of reading. From an official discourse on its early incubation to the present day, others like ecologists, botanists, zoologists, and conservationists have also mapped the trajectory of the park, but from a synchronic perspective. A large variety of writings on Kaziranga are essentially natural histories of the park (Gee 1964, Sehgal & Barthakur 2008, Barua & Das 1969; Dutta 1996). Much of all such understanding has also been subjected to an emerging reading public, carved out of recreation seekers. The official, rather the bureaucratic version, centralised the individual wisdom of key British officials, Viceroy Lord Curzon and Lady Curzon, in transforming the forested zone to a game sanctuary (Sehgal & Barthakur 2008). Ignoring the fact that there was hardly a conservation programme of wild animals in the British imperial polity, such an understanding also refuses to emphasise the complex interplay of the park's sociopolitical dynamics. A claim for success of the conservation narrative of KNP has been successfully linked to its declaration as the world's heritage site. In contrast to this is a discourse of strict vigilance on the territorial sanctity of the park, like authorising the forest guards with a shoot-at-sight order. The official discourse thus necessarily links the narrative of success to the militarisation of the park's space. This essay, to recover the dense social texture that went into the making of the park from a photographic or 'coffee table' description, attempts to understand the complex journey that the KNP has taken over a period of a century. I begin the essay by familiarising the readers with the general condition of game and sport in nineteenth century Assam. The second part of the essay tries to map the Assamese wisdom of wildlife conservation. The essay in its third part then addresses the evolution of a colonial bureaucratic programme, which led to encircling of a forested zone to restrict game having privileged access of the colonial elites. The next sections examine the interplay of bureaucratic pressures, a nuanced science of conservation as well as political pressures, which shaped the trajectory of Kaziranga to acquire a central place in the history of the Indian conservation programme.

### GAME IN COLONIAL ASSAM

In the nineteenth century the relationship between the wildlife in Assam and colonial state was never cordial, as anywhere in the colonial world. While the few big animals were either ruthlessly killed or maimed, many escaped this cruelty. The most illustrative of them was the elephant. As the luckiest one, the elephant provided the colonial state with substantial revenue. The number and variety of unlucky ones, however, was more wide spread, although game was a not very favourite activity in Assam, mainly because of the soil condition of the region. Illustrative of such a game in Assam was pig sticking. Regarded as masculine game and also popular among the

European civil servants the game faced hostility from the topography. The sticky soil worked as a deterrent for the fast action needed for pig sticking. The conditions of the sport are best described in this way: 'In Assam and Burma, as in many other parts pigs are plentiful, but the ground impassable. On the Brahmaputra pigs 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' (Bart).<sup>2</sup>

The valley was generally characterised by alluvial inundated grasslands comprising of tropical wet evergreen forests and tropical semi-evergreen forests. Nonetheless, the riverine belt of the river Brahmaputra became a hunting ground for the British officials as well other European tea-planters (Bart 263). The region's topography, soil quality and long spell of rainy seasons meant that the sportsmen had to look for some innovative games. It will be wrong to suggest that hunting was merely a European activity.<sup>3</sup> The Assamese across their class position also participated in the hunting. As it was not merely confined to the higher echelons of the society, poor too killed wild animals. However, it is difficult to qualify the level of destruction of the game by the British and the Assamese. In all probability three distinct cultural layers for hunting could be identified.

The first of these categories was that of British sport. In the middle of the nineteenth century Major John Butler of the Fifty-fifth Regiment of the Bengal Native Infantry found the sport in Assam as 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 diversions of all kinds, for the English sportsman' (Butler 1855:215). Butler reported on the various forms of sports, namely, tiger, elephant, rhino and deer sport. According to his count in one day's sport 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'. Buffalo was seen as a big threat to agriculture. Butler said that in lower and central Assam large herds of hundred buffaloes 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' (Rangarajan 2001:25). Captain Pollock, a military engineer responsible for laying down the road networks in the Brahmaputra valley, in the nineteenth century, in an anecdote claimed that one rhino or buffalo was shot dead for every breakfast (Thapar 2003:218).

The Indian hinterland was richer than England in terms of the availability of game animals. Europeans were keen to experience the thrills of 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' (Rangarajan 2001:218). 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 to 100 yards of the animals (Rangarajan 2001). Kaziranga, which was declared a game reserve in the early twentieth century, was a planter's heaven for the sport. Even the rhino could be found in a later account of E.P. Gee who had firsthand account of game reserve in its early days. Gee, describing the condition of sport in Kaziranga in the late nineteenth century, wrote how.

In 1886 a certain sportsman went out on an elephant in the area, which is now Kaziranga to shoot a rhino. He encountered one and fired about a dozen shots at it from very 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: 219).

The second layer of hunting could be associated with that of the Assamese elites. Such hunting practices went beyond the purposes of recreation and could be linked with the question of cultural negotiation with the colonial elites. There was a good social network among these families both within Assam and outside it. Few illustrations will help us understand this aspect. Tarunram Phukan (1877-1937), an early nationalist and Swarajist and barrister, was known for his skill in shooting practices. This was particularly true for elephant hunting. Photographs with his trophies from game were a familiar picture of Tarunram Phukan. Phukan also trained local people, mostly belonging to the tribes, as a helping hand for his hunting. *Shikar Kahini* a memoir on hunting by Phukan vividly captures his struggle to become a good hunter (Phukan 1983). Other members of his family, including his father, were also known for their good skill in hunting.<sup>4</sup> His elder brother Nabinram served as a trainer for the local colonial officers in their hunting lessons. The Maharaja of Coochbihar was also a close family friend of Phukan by virtue of their hunting practices. To obtain a reputation of a good *Shikari* — hunter — such networks were important and desirable. Hunting was more popular in western Assam. Hunting in these areas upheld one's social status or a higher social status required a more ferocious animal to be hunted. Prasannalal Chaudhury (1898-1986), an Assamese nationalist and also a well-known literary figure, born and served in western Assam, recounted in his autobiographical memoir how he learnt the skills of hunting from his own family tradition (Choudhury 1988).<sup>5</sup> His father, a tahsildar, had a glorious career in hunting. Another example is that of the ruling families of Coochbihar.<sup>6</sup> They regularly visited the various forests in the northern bank in western Assam for hunting. Often they escorted colonial bureaucrats into these hunting camps. Such hunting was with large fan-fare involving

large number of peasants. The common victims were rhino, elephant and tiger. Between 1871 and 1907 Maharaj Nripendra Narayan shot dead no less than 370 tigers, 208 rhinoceroses, 430 buffaloes, and 324 *barasingha* deer (Thapar 2003:218). Display of tiger skin or elephant tusk in the private portico of these families, collected from such hunting events is another familiar story. The narratives of hunting in the families of Gauripur zamindars still play an important role in the social and literary imagination of Assam.<sup>7</sup> The forests of south Assam, presently part of Bangladesh, was also a favourite ground for elephant hunting.<sup>8</sup> Folklores around such hunting practices are in plenty (Nath 2004). Hunting practices collectively shared by the Assamese elites or neighbouring zamindars, fell little short of the spread and aggressiveness that their British counterparts had injected into the forest of Assam.

The third form of hunting was that of peasant communities who made regular forays into the jungle to kill animals for various reasons; the purpose of livelihood being the most significant one. Such hunting practices were regulated by a wide variety of popular customs. There was no distinct species of fauna that were targeted by the hunters. Some were killed for mere joy while many were brought down for meat. The ways and ends of these practices differed according to the needs of the strata involved in it. British officials began to ascribe cruelty with such hunting practices. The best example of such emphasis on cruelty was that of M 'Cosh who as early as 1837 mentioned that in the northern frontier of the province the *Singphos* killed elephants by using poisoned arrows fired from a musket. After striking out the teeth, they would leave the carcass alone there to be 'devoured by beasts of prey' (M'cosh 1975:44-45). Later writers, though not necessarily focusing on ravages of such practices, did notice a wide variety of such skills:

The Kacharies of Assam stretch a long, wide-meshed net across the countryside and then drive game into it; everything living that runs into the net is killed with spears and staves. Other tribes like the Mikirs of Assam poison water with the bark of certain climbers and kill all the fish in the locality. In the North Cachar Hills of Assam there is a practice of destroying birds, which are attracted to fires lit at night at certain times of the year for the purpose. The Nagas of Assam have virtually exterminated wildlife, even birds, in their hills particularly since the war when large quantities of weapons came into their possession (Stracey 1963).

Illustrative of such utilitarian needs is that of western Assam where buffalo was also hunted for the purpose of domestication. It was believed that the wild animals, which were domesticated, gave more milk and they better suited the ecological context of the rural side of Assam compared to the one bought from the markets in Bengal. The hunters took extreme care not to hurt such animals. For instance elephant catching involved many rituals and other cultural practices. The question of enjoyment or sports came to be associated naturally herewith. Peasants took recourse to tiger hunting as a measure to protect agricultural production. Popular hunting was only widely practised during floods. A wild animal was looked at with fear and could be the cause of a lot of damage

to the everyday lives of the peasant society. Such stories can often be found in Assamese folktales.

### **ANIMAL PRESERVATION: THE ASSAMESE WISDOM**

A number of Assamese also took active interest in safeguarding the wildlife and wrote articles on hunting as well as conservation. In everyday practices too, a number of tribes showed respect to wild animals although there was no cause for their conservation as understood in the modern language.<sup>9</sup> The number of people who practised professional hunting was marginal. Only few practised hunting as part of their leisure. The significant association with wild animals, in the colonial times, was the one with the elephant, involving their capturing, ownership and domestication. Trade in elephants was both for live elephants and ivory (Saikia 2003, Saikia 2005). This resulted in both social wealth and economic profit. Those who became rich by elephant trade came to be socially known as *hati-dhani*. Such acquired social prestige was inherited by the following generations. It is difficult to estimate the wealth they had earned through this process, but that its impact was surely of the highest level could not be minimised.

It was only through the legislative affairs and the space created by the newspaper that the Assamese could carve out a space for expressing opinion for conservation of the wild. Although the experiment of game reserve was yet to emerge as an aspect of wildlife habitat, there was considerable expression of concern about the deteriorating condition of the wildlife among few leading Assamese intellectuals in Assam, early in the twentieth century. Although their number was limited, at least those who spoke and spelt out the wisdom of preservation and protection had considerable influence in the local society. The most significant piece of contribution came from one of the leading intellectuals, Pitambaor Dev Goswami (1885-1962). As a *satradhikar* — religious head of the Vaishnavite monastery — Goswami not only had a strong presence among the peasants and other Assamese middle class, but he used to draw attention from the government. His concern for wild animals was more utilitarian than religious. In a rather well-thought out essay Goswami expressed concern about the decreasing number of wild buffalos. The latter had precious social value among several communities (Dev Goswami). His concern was for the local wild buffalos and he also categorised them as Assamese buffalo. He considered them as strong and with great milking capacity. In his essay he recounted the tragedy through which these buffalos had to pass, despite repeated attempts to bring this to the attention of the government. He spelt out clear policies on how to preserve them and also showed the availability of the forested areas which could be safely used for the preservation of these animals. Goswami was categorical in spelling out the necessity of wild buffalo conservation and indicated that they could provide a remedy to the growing need of milk. He also did not shy away from appreciating the physical beauty of the animals.

### **SPORTS AS PRIVILEGE**

By the end of the nineteenth century there was enough hunting and sport, mainly by the colonial officials and European planters. While there was limited control over the European sport, the native hunting practices were gradually identified as based on cruelty. The Bengal Forest Act of 1878 vested the Forest Department with the power to regulate access to the government woodlands. The definition of forest produce also included hides, horns, tusks and skins. All such products belonged to the government if they originated in the Reserved Forests. The Assam Forest Regulation of 1891 also retained the basic thrust of the 1878 Act in matters of wild animals. Independent of the Bengal Forest Act, an Act passed in 1879 soon restricted the access to elephants. Throughout the British Empire there were few other Acts, which were passed ostensibly to protect the game (Thapar 2003). The Wild Bird and Game Protection Act of 1887 and Act relating to the fisheries of British India of 1897 were important pieces of legislations. However, most of these Acts remained as dead letters in Assam till the early twentieth century.

The most important intervention came in 1912, when the Forest Department promulgated the Wild Birds and Animals Protection Act, to regulate access to wild life.<sup>10</sup> The Act restricted hunting in the reserved forests during the rainy seasons. Shooting of the rhinoceroses was also prohibited. The growing concern about the depletion of the game had probably forced the foresters to the strict implement the Act. Licences were issued to shoot wild animals with a primary purpose of protecting the crops. The number of such licences was 4500 guns during 1917-1918. Within a couple of years of its implementation, the department admitted that the Act suffered from many lacunae.<sup>11</sup> There was not sufficient staff in the Forest Department to look into the affairs of the Act. During floods there was indiscriminate slaughter of animals, in particular the deer, with the aid of nets, guns and spears in Nowgong, Darrang and Sibsagar.<sup>12</sup> The Forest Department pointed out the apathy of the police and revenue officials as one of the reasons that contributed to the indiscriminate killing of the animals. In 1918, six cases of killing deer during the close season were taken into the court in Darrang, of which only one resulted in conviction, realising a fine of Rs. 15. Innovative games left many animals at the mercy of their political protectors. Occasional legislative pieces and increasing interest shown by the colonial administrators since then brought new hope for the wildlife. During this time conservationists like Arthur John Wallace Milroy (1883-1936) became instrumental in preserving the rhino in a scientific way.<sup>13</sup>

### **PROTECTING THE WILD: MAKING OF GAME RESERVE**

As there was increasing pressure by the colonial government to control access to wild life, the colonial sportsmen looked for more privileges in matters of sport and hunting in specified tracts, which resulted in the formation of game associations. Since the early twentieth century, there was a concerted effort,



primarily on the part of the European tea-planters, for the formation of a game association in Assam. For instance, a game association was formed in the district of Darrang to coordinate with the Forest Department in matters of wild life protection.<sup>14</sup> There is no conclusive evidence to suggest the social milieu of the members of the game association or the history of its formation, but in all likelihood, the planters were the members of this association. The association had only six members in 1917.<sup>15</sup> The basic purpose of these game associations, like their counterparts in the British Empire, was to regulate game as well as evolve rules for the future preservation of the game. The Darrang Game Association suggested that there should be rules and regulation for the control of game and shooting in Assam, in line with the Nilgiri Game Association.<sup>16</sup> After a series of negotiations the association was granted the privileges of hunting, shooting and fishing for 10 years from 1 July 1915, in the few reserves in the district of Darrang. The association also undertook the employment of watchers to protect the game and accordingly four watchers were employed. However, the euphoria of the game association soon disappeared. Among the Europeans, a small section of the planters' community took the leading role in the preservation and observation of the rich fauna of Assam at the right time. A number of colonial officials were also aware of the fact that there had been a concerted effort in several parts of British India, the forests of Central India in particular, to protect the game.

In the early twentieth century, the concern for game acquired a new dimension with the threat of the rhino becoming visible. One of the earliest official manifestations of such destruction of game became apparent when the Zoological Garden in Calcutta, requested the Assam government to supply it with matured rhino. The Zoological Garden, established in 1875 and one of the Asia's oldest one, had by then become a centre of collection of various animal species in British India. Their effort to collect animals from across the country often resulted in a dismal condition of the animals. Illustrative of such rarity was the case of the lions in the present Gir National Park, when it was found that the animal was now only confined to a handful of locations from that of previously wider territories (Divyabhanusinh 2005). Despite prospects of good revenue from supply of rhino, the Assam government expressed its disability to comply with the request. A preliminary enquiry revealed that the existing condition of the rhino population was far worse compared to the measures adopted in other parts of British India to protect game.

Describing the condition of the fauna in general and rhino in particular the Officiating Commissioner of the Assam valley, J.C. Arbuthnott, in a letter written to B. Fuller, the Chief Commissioner of the province, in 1902, argued that 'the animal which was formerly common in Assam has been exterminated, except in remote localities, at the foot of the Bhutan hills in Kamrup and Goalpara and in a very narrow tract of country between the Brahmaputra and Mikir Hills in Nowgong and Golaghat, where a few individuals still exist'.<sup>17</sup> He emphatically pointed out that in the last couple of years the killing of the animal had been accelerated and the game

had almost disappeared from various forests. Explaining the reason for killing, he also argued that the hunters from Bengal 'who included novices' fired 'at anything that got up in front of them'. He claimed that in the case of the rhino the slaughter of females and immature animals had brought the species on the verge of extinction.<sup>18</sup> "I am convinced that, unless an order of the kind is issued, the complete extinction of a comparatively harmless and most interesting creature is only a question of a very short space of time'. That the Assam Forest Department was hardly aware of such a condition of the animal also became apparently clear. Arbuthnott suggested that there should be some form of restriction in the killing of the animal. He claimed, "An order prohibiting or limiting the destruction of rhinoceros without special permission would, I feel sure, be welcomed by all true lovers of sport and natural history".

The Assam Forest Department had very little means to protect its fauna.<sup>19</sup> Whatever sporting rules did exist in the Assam Forest Manual, the Assam administration had no doubt that it was only a 'dead letter'. Rampant killing of the rhino attracted the attention of the public too. There was already public concern about the protection of rhinos in Kaziranga.<sup>20</sup> Several Assamese, and also British officials, in Sibsagar expressed their dissatisfaction in the deplorable condition of the game in the forests of Kaziranga. In 1903 *Times of Assam* published a letter decrying the extensive killing of the animals. The letter lamented the rampant manner in which the local Mikir tribe had taken to the profession of killing the animals. By this time even hunters from Bengal arrived in large numbers to have an experience of killing the animals resulting in a reckless and indiscriminate destruction of the all the game in the province.

The rhino, unlike the elephant, however, was a species which was neither relegated to the backseat nor ardently sought after by the pre-colonial state. The earliest mention of the rhino in regional religious texts was that of *Kalikapurana* where sacrifice of the rhinoceros, which was in practice in the Kamakhya temple, had been described.<sup>21</sup> Although rarely associated with domestic practices it used to live on the grassy land. As the latter worked as cultivable agricultural land, the threat to its habitat was under constant pressure. However, a comparatively low pressure of agrarian expansion and the conflicts with its habitat never acquired a serious magnitude. The early nineteenth century accounts of the rhino, describing it as living in 'the most densest and retired parts of the country' also claimed mention of the use of rhino horn for medicinal purposes. By the early decades of the nineteenth century, Assam acquired a place for its rhino horn along with bees wax and others, as key forest produces.<sup>22</sup> Few others also noticed the domestication of the rhino.<sup>23</sup> Another nineteenth century record also mentioned private ownership of rhinos.<sup>24</sup> John M' Cosh, a commissioned traveller to Assam, writing in 1836, mentioned the export of the young calves to Europe. By the early twentieth century entry of mercantile capital into rhino horn trade became well-known.<sup>25</sup> The gradual expansion of the agrarian frontier into the un-classed forested zone, characterised by grass land, also worked as a new deterrent to the animal's habitat. An

animal, found in scattered places and often killed for its horn trade, gradually came to be identified as a rarity (Dinerstein & Mccracken 1990). An estimate taken in 1912 in Kaziranga indicated the number of one-horned rhino at 100.<sup>26</sup> Possible extinction of some animals, like the American Bison, also already drew the attention of wildlife conservationists.<sup>27</sup>

A couple of months later, Fuller admitted that although it was desirable to ban the killing of the rhino, the sanction of the legislative council was most necessary. An Act aimed at regulation and prohibition of shooting was yet to come into the province. Given the interests and pressure of those interested in the game, Fuller rightly appreciated that undoubtedly such a legislative intervention had to come.<sup>28</sup> Another alternative for the government was to consider the formation of an 'asylum' to protect the rhino. Such an asylum could be formed by 'taking up as reserved forest, a sufficient area of suitable land' as a habitat. Fuller also suggested that a larger forest tract could be considered for the rhinos or other such game. Demarcation of tracts for game should not interfere with the existing agricultural practices and the government decided to allow expansion of agriculture into the un-classed forests to accommodate new demands. Fuller made it clear that the department should not spend a lot of public money on such undertakings and the department would not afforest land which was suitable for cultivation.<sup>29</sup>

For Arbuthnot, the idea of an asylum appeared as more than agreeable. Support from several deputy commissioners came in handy.<sup>30</sup> A. Playfair, the Deputy Commissioner of Sibsagar, was hopeful that there would not be too much expenditure in the creation of game reserves except the maintenance of forest guards or keepers. An apprehension about the effectiveness of such asylums in Goalpara, usually identified as easy access for the Bengal hunters, still remained. To overcome such an 'unsportsmanlike practice of indiscriminate shooting to swell the bag', Arbuthnot still thought only probation could work. This resulted in the selection of several tracts which could be reserved as special protected tracts for the rhino. Certain tracts in North-Kamrup, Kaziranga — a tract lying in both the districts of Sibsagar and Nowgaon, and Laokhowa in the district of Nowgaon were identified for this purpose. These tracts were mostly located in the un-classed forests covered with reed and grass. The primary characteristics of flora in Kaziranga were the dense and tall elephant grass intermixed with small swamplands, supported by annual flood caused by the river Brahmaputra. This ecology also meant the presence of a wide variety of animals. In fact, Kaziranga was a well sought after forest for game and was a favourite of both the Assamese and British 'gentlemen'. The main artery running across the province crosses the forests. This also worked as a catalyst for travellers to aim their gun at the game. On the other hand, the tract in Laokhowa, located in a forest in the riverine areas of Brahmaputra, hardly offered any scope of long-term durability as a reserved forest. In fact by the end of the twentieth century, a substantial part of the reserve came to be reclaimed as agricultural land. Despite a forthcoming proposal for such game reserve, the government made its

intention clear that it could not afford to expend 'public money on the undertaking'.<sup>31</sup>

This changing ground reality also coincided with a shift in the imperial concern towards fauna. Lord Curzon, the Indian viceroy, had in the meantime written to the Burma Game Association about the general extinction of the rhino.<sup>32</sup> Curzon also talked, in another context, about the 'progressive diminution' of wildlife in India, caused by petty trade and impoverishment of firearms.<sup>33</sup> Finally, in December 1904, Fuller instructed E.S. Carr, the conservator of Assam, to submit a proposal notifying game reserves. In accordance with those which were in force in the Central Province, a set of rules were framed to regulate shooting and hunting in January 1905. In June, Carr submitted a proposal for the formation of a game reserve in Kaziranga along with the Laokhowa and North-Kamrup forests. As consideration of an asylum for the rhino gave way to the formation of game reserves, this also led to elaborate enquiry into the existing agricultural practices and customary rights. Issues of additional manpower and expenditure also needed to be addressed. In the meanwhile, since 16 March 1905, shooting rules came into force. Hunting, shooting, trapping and fishing within a game reserved forest was absolutely prohibited. Complete prohibition of hunting came in the case of female rhinoceros and buffalo, accompanied by their young calves; hunting of female bison and green pigeon was also prohibited. Some animals came under seasonal protection. Hunters were required to obtain permits after paying a fixed rate, to hunt. Rates for permits varied according to their nationality. An Assamese was to pay Rs. 30 while a non-Assamese was to pay Rs. 50.

Official reports are silent about what happened in the subsequent days. New areas were added to Kaziranga. Officials began to express their apprehension about the survival of wild animals in a forested land often chosen by the grazers to herd their animals.<sup>34</sup> P. R. T. Gurdon, the Assam valley commissioner, however, thought that the success of the game reserve depended mostly on the hard work that had to be done by the lone game-keeper appointed for the reserve. Thus he thought '...if he did his duty, it should not be possible for Mikir shikars to poach in the reserve...the Conservator of Forests should be directed to insist on the game-keeper keeping a proper look out and reporting all trespassers'.<sup>35</sup>

While the government began to assert an exclusionist policy as a means of protecting the fauna, the peasants protested. In 1924 a large number of peasants, in a petition signed by several hundred from the neighbourhood of the sanctuary, strongly protested against the very idea of creating a reserve exclusively meant for animals, and demanded that they be allowed land for cultivation. They argued that this had emerged as a major threat to their agricultural practices.<sup>36</sup> The conservator was willing to create some space within the outer periphery of the sanctuary, but the subject never got any further attention within the bureaucracy.

As the Forest Department tried to expand the existing territorial boundary of the reserve, there must have been some enthusiasm among the officials. Hunting in the form of game continued to be practised inside the game reserve. The game

reserve was renamed as game sanctuary in 1916. A change in the semantic gradually helped to dissociate the work ethics of the game reserve from that of the forestry, primarily aimed at forest economy. Since then a few foresters' pro-animal focus within the general framework of the Forest Department's ideological paradigm came to have a significant bearing for keeping the beginning. The beginning perhaps is located in the intensive elephant management programme that evolved with Milroy. Milroy had already shifted his bureaucratic focus towards the evolution of a more humanitarian elephant catching programme and faced strong opposition from within the department. The methods of elephant capturing were gradually humanized and were given a systematic order. Milroy provided legal protection to the rhino and he successfully classified both rhino horn and ivory as forest produce, which made their collection as forest crimes, since 1932.<sup>37</sup> At the same time, the Assam Forest Regulation was modified, whereby, killing of rhinoceros in a Reserved Forest was made a punishable offence.<sup>38</sup>

### PROTECTING FAUNA: FROM GAME TO POACHING

With the introduction of a privileged and hierarchical system of hunting rights, now mostly confined to a limited few, and animals like the rhino coming under complete protection, the traditional hunting practices in Kaziranga came under serious scrutiny. Regulation of hunting required surveillance by few staff from the Forest Department. With a meagre fund being allotted to it, the fund required for their management was difficult to generate in the early days of the Game Reserve. Not only this, those who were specially entrusted to regulate the game had no expertise in knowing the hunters' social networks. That unauthorised hunting going on was not unknown to the keepers of the fauna, which gradually brought the idea of poaching in the official discourse of the Forest Department. The areas were regularly patrolled against poaching without bringing in additional infrastructural support. Such vigilance often met with armed resistance and the threat to the lives of the forest guards became obvious.<sup>39</sup> As the Forest Department admitted the increase in the destruction of the game, the vernacular press also exerted enormous pressure regarding the destruction of the game.<sup>40</sup> Publicly the department came to express its desire to protect the flora and fauna of the region. The social pressure created by the press about the game came to play a vital role in the policy formulations of the Forest Department towards wildlife. Despite such challenges the Department, decades later, could believe that the stock of wild animals had 'definitely increased'. An annual report thus claimed in 1950 that 'it is pleasing to note that many rhino calves with mothers were noticed in Kaziranga Wild Life Sanctuary...'.<sup>41</sup>

Yet poaching continued to be a major concern for the well-being of the wild animals. The most important danger to poaching was the rhino horn and elephant tusk. While the former had an emerging international market, the Assamese

handicraft sector in ivory craft provided a ready market for such illegal trading. Every part of the rhino's anatomy and its horn in particular had pharmacological utility and its demand was always high in the international market.<sup>42</sup> Illustrative of pressure from factors is an official note: in mid-1930s a forester wrote that about forty carcasses of rhino were removed from North Kamrup game sanctuary, now known as Manas, with the horns removed. Widespread and extensive poaching camps in almost all water bodies known as *bhils*, inside the Kaziranga Game Sanctuary, were noticed as early as the 1930s. This led the Forest Department to admit that poaching had emerged as a crucial factor in the game reserves.<sup>43</sup> A better supervision in Kaziranga had pushed the pressure to western Assam game sanctuaries like Goalpara and Kamrup, where the pressure of the market network was higher. The situation had aggravated to such an extent that poaching was no more confined to the game sanctuaries alone. 'Wherever game moves poachers move after'. Writing in 1932, A.J. Milroy gave another picture of the rhino in everyday life. Thus he suggested that, 'the rhino... is a difficult species to preserve even though its destruction is forbidden by law, because all parts of its body may be eaten even by the Brahmins and its horn its reputed throughout the East to process aphrodisiac properties, while it lays itself open to slaughter by its habit of depositing dung on the same heap day after day'.<sup>44</sup> The managers of the sanctuary had no doubt that less surveillance had allowed the poachers to establish a network and infrastructure to facilitate both hunting and trade. In certain places they had built permanent structures, known as *machans* — a raised platform — for hunting in different game sanctuaries. These *machans* were constructed near places from where it was easy to keep track of animal movement. Knowledge of the topography and ecology of the game sanctuary along with the knowledge of animal behaviour helped the poachers to gain complete control over a certain territory. For instance poachers could locate the presence of rhino inside the dense and grass covered jungle by often following their footmarks. Similarly the poachers chose the middle of the winter as the most convenient period for hunting, as during this period the grazing areas of animals got restricted and hence animals could be found in compact tracts. Widespread use of unlicensed guns also came to be noticed. Hunters, now re-designated as poachers, came from different ethnic communities belonging to different localities. Their areas of operation were not limited to a single locality and hence frequent change of areas made it difficult for the forest guards to track and recognise them. An official account claimed that the local village headmen worked in tandem with the poachers. This made it possible for the poachers to move freely in the jungle, get their ammunition, and find shelter. Poaching had brought ready money and it had allowed the poor to become rich overnight.

In the meantime, mercantile capital and hunting worked in close tandem. Investment of mercantile capital in other forest produces like lac, honey, or rubber had been noticed since the early nineteenth century. Strict supervision decreased the intensity of poaching, but soon, forgery in the trade of animal lives, particularly in rhino horn, acquired a complex



character. With the onset of world economic depression, a snag in the trade was noticed since 1931. Such a snag was not the result of any major disruption of animal trade, but the unwillingness on the part of the Marwari traders with interest in rhino horn to invest in the trade of forest produces. They complained of the large-scale presence of fake and forged animal body parts in these areas. There was a report of a large-scale, faked rhino horn in such a trade network. They came to be noticed in different places (Gee 1952:216).<sup>45</sup> Milroy on the other hand indicated that, although rhino horn trade in India had a long history, the trade would acquire much larger international demand in the wake of the recent decline in the rhino habitat in south-east Asia. Milroy suggested that ‘...in recent years China has also been in the market, consequent to the practical extermination of *Rhinoceros sondaicus* in Lower Burma, Tenasserim and so on, with the result that a horn is now worth just about half its weight in gold’ (Milroy 1932:28-40). An increase in demand for the rhino-horn had a ‘lucrative business’ in it. Milroy noticed that an ‘organisation’ was formed ‘for passing on rhino horn and elephant tusks to Calcutta’. Such a trade could be effective only with the help of skilled local hunters and Milroy identified them with the Assamese tribes.

Failure to keep the fauna from further damage, an energetic Forest Department, in 1938, proposed new sets of rules aimed at bringing further restriction in shooting rules.<sup>46</sup> However, within a year of its application, it was found that they were unsuitable for the purpose for which they were framed. The shooters claimed that the fees were too high. This prevented many people from taking a licence. A revised set of revised shooting and fishing rules were promulgated in the next year.<sup>47</sup> This had reduced the pressure on the animals, but never acted as a complete deterrent to the threat of its well-being. Faced with the drawback of the legal framework, the officials in the Forest Department thought that the game reserve could be protected from the increasing pressure of poachers, and also their detection was to integrate networks of *reliable* and skilled sportsmen for the management of the game reserve.<sup>48</sup> The idea, however, never found any takers. That the practice of hunting was more widespread and closely integrated to the local livelihood practices was known to many experienced observers. Essentially, poaching, as understood by the Forest Department, was linked to their livelihood. In the 1930s, Milroy came out with an idea that licensed hunting should be allowed. He also advocated for keeping the subject of fauna from the purview of the elected assembly. Apprehending of a further decline in rhino habitat, Milroy thought that ‘there is thus a danger that one, and possibly both, of the best rhino localities may shortly be handed over to a Government, which will have to deal with many conflicting claims for financial support, and the members of which will start with little innate sympathy for the problem of protecting wild life’. E.P. Gee, the perceptive tea-planter and wildlife conservationist, could see that the a number of Mikir peasant families who lived on the southern boundary of the Kaziranga Game Reserve used to frequently hunt inside the reserve.

Poaching acquired a larger international dimension in the last decade of the previous century (Martin 1980).<sup>49</sup> Since then the international market of South East Asia, the Chinese in particular, grew, and drugs based on a presumed pharmacological understanding of rhino horn containing medicinal properties came to have a direct bearing on the well-being of rhinos in Kaziranga. In the absence of any concrete statistics of how many such rhino horns had been exported into an international market, it will be difficult to suggest. Despite pressure from the international network, zoologists argue that the general health of the rhino is still beyond any great threat.

#### CONFLICTS SURFACED: GAME RESERVE AND AGRARIAN PRACTICES

The nature of ecology in Kaziranga was self-sufficient enough to create other problems since its early days, which acquired a serious threat to the conservation programme of the fauna in the mid-twentieth century. The ecological setting of a game reserve was generally associated with reed and grass coverage. Such an ecology offered favourable ground for both grazing and production of winter crops. The practice of grazing by professional grazers in un-classed forests adjacent to the newly demarcated game sanctuary was reported since the early twentieth century. Scattered peasant cultivation was a prevalent practice. I have already mentioned earlier that the game reserve, since its early days of formation, had new territories added to it, at the cost of the existing agricultural practices. Such restriction on agrarian activity remained a temporary strategy as the pressure from the peasants never disappeared. The new agrarian frontier had reduced the area for grazing of these animals. Also the area officially earmarked for grazing got squeezed with the coming of the game reserve. The Forest Department was strongly against any neighbouring settlement with the grazers, whom the department regarded as unwelcome. Within a decade, the officials were almost unanimous that these grazers were mere ‘inveterate poachers’ and ‘their proximity to a game sanctuary is most undesirable’.<sup>50</sup>

Before the formal notification came, it took a couple of years to assert the right of the State in the forests. Opposition from the peasants became clear, as they protested the curtailment of their temporary tenures. Domai Ahom, a peasant having agrarian works inside the proposed reserve was forthcoming in his opposition. He claimed that ‘we object to the reserve because the increase in wild animals will make it impossible to cultivate our land. We also object because we shall not be able to get firewood, cane and bamboos from the jungle. We also shall not be able to get fish. We have lived here for generations, and get our firewood, cane and bamboos from the Kaziranga jungle.’<sup>51</sup> Some villages had a permanent nature. The suggestion of A.W. Botham, the forest settlement officer, of providing the peasants practising cultivation inside the proposed reserve, with little financial support to remove their houses away from the reserve did not find any support. Despite the protests their rights came under a scanner and subsequently they lost it. The formal pronouncement of Kaziranga as a game



reserve came in 1908, in an approximately 90 square mile forested area. Once it was declared a reserve, shooting was prohibited inside these forests. In subsequent days licences were issued to both the Assamese and British sportsmen for shooting, although nothing had been recorded to tell us how many acquired such licences. More crucially the department also faced the problem of existing agrarian practices. A wide variety of agrarian activities were practised by a scattered peasant habitation, generally characterised by small peasant holdings. There were grazers with buffaloes and cattle. A census estimate taken prior to a proposed extension to the game reserve in 1916, indicated the presence of 2278 buffaloes and cattle. Un-classed forests, perpetually abundant with reed, grass and low water bodies, provided ample opportunity for the peasants to practise cultivation and grazers to keep their herds. The State also encouraged such reclamation in un-classed forests (Saikia 2008). For the peasants, reclamation of un-classed forests meant that they could only acquire an annual lease, which did not entitle the peasants to any tenurial rights. Such areas were only suitable for shifting cultivation. Thus, practise of shifting cultivation did not entitle the peasants any legal support and as such this made their displacement an easier task for the Forest Department. With the formation of a game reserve, and the subsequent expansion of the territory of the game reserve, official prohibition on the well spread out, but scattered peasant cultivation, came to be reinforced. Peasants were marginally compensated for displacement from their resources. Such restriction, however, did not go without protest. As cultivable land was not available in the possible neighbourhood, there was no option for the peasants but to travel far away distances in search of land.<sup>52</sup> Demand for access to the sanctuaries for grazing acquired an organised form in the middle of the century. Demand for de-forestation of game reserves had acquired wider proportion.<sup>53</sup> Added to this, new organised pressure was the tactical support from the neighbouring political leaders. Often such pressure was the result of a conflict between Assamese landless peasants and Nepali as well as Assamese grazers. As professional grazing reserves, areas specially earmarked for the grazers, mostly in un-classed state forests, were allowed for reclamation by the landless peasants; the former pressurised the government to earmark other areas. Kaziranga, suitable as a general habitat of animals, became a good choice for the grazers. The claim for access to un-classed forests near Kaziranga came from the grazers of neighbouring areas. To substantiate their claim, backed by local Congress leaders, they even argued that their *khuties* (diary firm) would work as a natural buffer against poaching.<sup>54</sup> They also offered to undertake 'responsibility as honorary forest guards and watchers to prevent poaching'. The Forest Department failed to challenge any further restriction and gradually the neighbourhood was kept open for grazing. This was particularly true of the adjacent un-classed state forests, which were rapidly thrown open for agricultural purposes. Since the 1940s grazing, to the comprehensive satisfaction of the government, with aggressive support of the provincial Congress leaders now in command of the la-affairs

of the state, was intensively practised in the un-classed forests. Kaziranga could not escape from an aggressive phase of the grazing. The Nepalis who had migrated from the lower Himalayan terrain were well-known grazers. A section of the Assamese landed class, later on joined by a few others from among traders and businessmen, also began to invest in this lucrative diary business. However, their role was confined to owning such diary farms and keeping the Nepali grazers as keepers of their farms. Their actual participation in the actual practices of diary farm was nominal.

While the Indian Board for Wildlife continued to express its opposition of grazing practices,<sup>55</sup> by the end of the century, grazing and other agrarian practices in the neighbourhood of Kaziranga had acquired a larger dimension, unthought-of while it began. Various layers of social interests in the agrarian activities had emerged as a serious threat to the independent existence (Shrivastava & Heinen 2007). In the meanwhile, after a century of sland reclamation, available agricultural land in western and central Assam was exhausted, a slow migration began towards eastern Assam. In the social imagination, the un-classed forested zones and even defined territories of Kaziranga emerged as territories awaiting reclamation. The erstwhile East Bengal peasants, now citizens of a modern nation-state, with a history of successful migration, became the forerunners who came here in search of land. Such complex layers of agrarian interests apparently retained powerful political connections. Over the years, the state political discourse has been trying to derive political benefit from occasional outbursts against such agricultural practices. Such a discourse also refuses to de-link both poaching and encroachment as two separate sets of the problem.

That rapid expansion of the agrarian acreage put serious pressure on the wild animals came to be manifested in several forms. Expansion of peasant cultivation entailed conflict of pasture for domestic stocks with living space for wild animals. Along with this the essential focus on those *big animals* came to have an enduring impact on the park's ecology. The growing ecological crisis had been successfully reduced to a man-elephant conflict in scientific, bureaucratic and popular discourses. Moreover, the geographical location of various sanctuaries created further problems for the well-being of wild animals inside the sanctuaries. The new artificial territoriality imposed by the reserve and meant to be a new home for the wild animals, was hardly recognised by the latter. They continued to visit their previous habitat range; this was understood by the keepers of the forest as the straying of wild animals into human habitats. This often led to their killing by the foresters. Often leading fauna conservationists, like P.D. Stracey, took an active part in formulating such a programme.<sup>56</sup> On the other hand, as the game reserve along with others like Manas & Sonai-Rupa were situated close to the hills, it provided access to the wild animals to move up the hills during the rainy season. Such lateral movements of the wild animals made the monitoring of the game a difficult task.

Even while the question of protection came to the forefront, the policy makers could not avoid the matter of hunting too.

For the early protectionist, the game sanctuary needed to give equal status to both controlled hunting and preservation. A good example of such a defeating principle was that of the Manas game sanctuary, when it was suggested that the game reserve be a shooting reserve, where sport-hunters be allowed to collect trophies and the fees thus collected be utilised for the protection of the wild animals from poachers (Bhardhan 1934: 802-811; Milroy 1934: 97-105). Even prominent conservationist like Milroy could not escape from this early dilemma and allowed both hunting and conservation to co-exist. Another pertinent issue which deserved our attention was the role played by some key foresters — a pro-animal focus within the general framework of the Forest Department's ideological paradigm. The beginning perhaps was located in the intensive elephant management programme that evolved with A.J. Milroy. Milroy shifted bureaucratic focus towards the evolution of a more humanitarian elephant catching programme. In doing this Milroy faced strong opposition from within the department.<sup>57</sup>

### TOWARDS A NATIONAL PARK

Since the establishment of the Kaziranga Wildlife Sanctuary, it essentially remained a place for game and recreation for a limited few. In the post-independent period the attitude towards the wildlife sanctuaries had changed.<sup>58</sup> Concern for wildlife came to occupy an important position in various public debates. Systematic arrangement was introduced to 'watch' the wild animals. It educated the natives to appreciate their wild life and help in the growing concern for the preservation of wild life. Immediately after independence, in March 1949, the new independent provincial government invited two of India's renowned wildlife conservationists, Salim Ali and Dillon-Ripley, an American Ornithologist to enquire into the condition of the wildlife of Assam and to make recommendations for the improvement of its sanctuaries.<sup>59</sup> They were accompanied by people like E.P. Gee and C.G. Baron, for acquainting them about the condition of wildlife in Assam. Ali and Ripley visited four main sanctuaries and submitted their report to the government. They made a film on Kaziranga and prepared a report on the condition of the wild life in Kaziranga. Their visit gave legitimacy to Kaziranga as a site for a wildlife habitat, at least from the perspective of ornithology. This was also a major initiative taken by the government of Assam to publicize the cause of wildlife throughout the country. The most important aspect of the report was the brake that it had put on the raised number of rhino population in Assam. Their estimate was drastically the opposite of the already believed number of rhino population in Assam. For example prior to the visit of Ali and Ripley various official estimates about the rhino population in the Manas game sanctuary were somewhere between 40 and 150, while they put the number at a maximum of nine. Both of them found only two tracks during their six days of stay in that game sanctuary. Ripley's visit, on the other hand, made it clear that till now there was a serious attempt to understand the biological behaviour of key animals like rhino in Kaziranga (Ripley 1952:570-573).

For a couple of decades, the objective of establishing the game sanctuaries seemed to be a success in spite of the many hurdles it faced. The wildlife protectors believed that the numbers of wild animals had increased in some cases. The following is illustrative of such confidence:<sup>60</sup>

Tigers have increased to such an extent that there must have been a good deal of fighting among them for booty. The carcass of a hog deer with the skin over was seen by the writer, hanging from the branch of a tree about 15 feet from the ground. Apparently when several tigers were fighting for enjoying the kill one must have taken it up and hung it by putting the head of the deer in between the branch and the main tree, so that he alone could enjoy while the rest would be watching him. Innumerable scratchings on the bark, over the trunk of the tree, showed that attempts were made by the rest also to have a part of the booty.

Furthermore, in 1950, the game sanctuaries were given a new terminology — they were to be renamed as Wild Life Sanctuaries. The official reason behind the change was that the word 'game' referred to those animals and birds that were shot for trophies and for meat, whereas, the term 'wildlife' embraced all living creatures, and implied their conservation. To give protection of wild life more legitimacy a State Wildlife Board was formed in 1953, a year after the Indian Board of Wildlife was set up at the national level, with people like Satradhikar Goswami of Garmur, Prabhat Chandra Barua and E.P. Gee as its members.<sup>61</sup> Their selection was based on their interest in the preservation of wildlife and also their public standing. However, the board turned out to be an ineffective one, as, since its formation it met only once in 1958. The other purpose served by the game sanctuary in the next couple of years was to sell rhinos to a number of international zoos generating nominal revenue. During 1949-1955 a number of rhinos were sold to zoos.<sup>62</sup> Such sporadic sale continued and was welcomed by the Forest Department. Nevertheless, the rhino continued to face severe threat for its horn. The situation further deteriorated after independence and, in 1954, writing to the Indian Prime Minister J.L. Nehru, whose appreciation of wild animals had an enduring impact on the history of Indian wildlife conservation, the Chief Minister of Assam Bishnu Ram Medhi again admitted that the animal was on the verge of being extinct in the region.<sup>63</sup> The chief minister also admitted that his government was under pressure from several international bodies for protecting the animal. Subsequent to this, in December 1954, the Assam government introduced the Assam Rhinoceros Preservation Bill. The bill aimed at protecting the rhino from being killed, captured and injured both within and outside the Reserved Forests as well as leased land.<sup>64</sup> Several members raised apprehension about the animal's unproductive nature and its low birth rate.<sup>65</sup> Members across their party affiliation argued that considering the animal's importance as a 'state heritage' and its ability to generate money and pressure on its habitat, it needed to be protected.

Simultaneously, from 1963, the Indian Board of Wildlife also put pressure to protect the animal. During this time, the board had acquired a new dimension in managing wildlife sanctuaries. It stressed on the need for more numbers of such sanctuaries and

prohibition of grazing within these areas. The board had taken another important initiative of not allowing 'foreign dignitaries and VIPs' to shoot inside the parks. This was a rather significant directive to spearhead the cause of preservation of wild life. There was continuous pressure to allow the Department of Tourism to manage tourists inside these sanctuaries.

With the cooperation of the professional wildlife conservationists it was now realized that the protection of wildlife inside the sanctuaries needed the cooperation of the neighbouring people. The problems arising from close contact between the human habitation and the wildlife could be not evaded anymore and hence the programme of national parks was emphasised. The process began in 1953, when the Forest Department submitted a proposal for wildlife sanctuaries to be converted into national parks.<sup>66</sup> Growing pressure from international wildlife experts to inspect the claims of success of this sanctuary led the sanctuary to be opened for further inspection.<sup>67</sup> The situation changed in 1967, when a larger international survey was undertaken in India as part of the Smithsonian project, to assess various wildlife habitats. A census by Juan J. Spillet, an American ecologist serving at the John Hopkins Institute, undertaken at the initiative of E.P. Gee, a significant initiative in terms of assessing the biodiversity of Indian wildlife habitats, brought out the continuous pressure on the fauna by various pressures in Kaziranga (Spillet 1966:494-533). The survey was carried out with key support provided by H.K. Nath, the divisional forest officer of Sibsagar. The survey was conducted by dividing the entire area into eight blocks. These blocks were further divided into sub-compartments of 'approximately five square miles, artificial boundary lines being cut through the grass where necessary' (Rowtree 1981:67). Spillet's survey made it clear that enough destruction was done to various nationally recognised wildlife habitats, which required immediate intervention.<sup>68</sup> Such warning of a possible threat to the wild-life habitat began to draw state attention. Simultaneously, development was the larger state-led thrust towards creation of national parks. In 1963 the Indian Board for Wildlife, in its fifth session, recommended that Kaziranga and Manas wild life sanctuaries be made into national parks; the execution of this had to wait another couple of years (Gee 1967:339-341).

In March 1968, a bill was introduced in the Assam Legislative Assembly with a view of preserving the rhino in Kaziranga as well as attracting wider international attention to it. This again brought back the concern raised by legislators in 1954. In the national context, specific concern for animals like the tiger and lion was yet to take shape. The finer shape to an assertion of national concern came only in 1969, when Indian Prime Minister Indira Gandhi spoke at the International Union for Conservation of Nature (IUCN). Localised regional nationalistic under-currents coalesced around the rhino, before similar national level concerns crystallised around the tiger leading to Project Tiger. The bill was sent to a select committee, chaired by Chief Minister Mohendra Mohan Chaudhury, and without any major change it was passed in the winter session of the assembly in 1968. The *Assam National Park Act of 1968* came into effect since 1969.<sup>69</sup> This also resulted in the submission of a proposal to declare Kaziranga Game Sanctuary

as a National Park. In January 1974, in pursuance of the Assam National Park Act of 1968, the Kaziranga Wildlife Sanctuary, distributed across an area of 430 square miles, was declared a national park.<sup>70</sup> The making of a national park resulted in getting more centralised fund as well as its transformation of site found tourist attention. This was an important step towards the infusion of a more systematic attempt in drawing serious attention from the community of scientists to strengthen the idea of making Kaziranga Wildlife Park (KNP) a major site of wildlife habitat. The well-being of the wild animals in Kaziranga even distracted the attention of the politicians in the 1970s, and it so happened that many a times questions were raised in the Assam Legislative assembly about the growing killing of wild animals in Kaziranga.

### PROTECTING THE WILD

Protection of fauna meant only affording privileged access to game for the colonial elite, Indian and British included. Little was enquired to know the well-being of the animals. The pasture needed for a wide variety of animals was taken care of by the reserve's ecological setting and, more importantly by the animals themselves. Localised crisis of food forced the animals to migrate to the hills across its southern fringe. It was also beyond the administrative expertise of the Forest Department to understand the animal habitat. That foresters had by now essentially come to acquire expertise in plant science was a well-known fact; and as such that a diverse set of habitats were represented in the park including open marsh, grassland, swamp and evergreen and semi-evergreen forests became clear early in the previous century. The earliest plant collections were undertaken during the period 1912 to 1915. Inventory by the foresters was limited to the places that were accessible to them. No census was ever taken to understand the rarity of animals like the rhino in the sanctuary. An estimate of the animal distribution was mostly done on the basis of visitors' accounts. In March 1945, although such estimates were not verified independently by the Forest Department, a visiting group was fortunate to see 30 rhinoceros, 80 buffaloes, a single elephant and numerous deer within a week.<sup>71</sup> E.P. Gee was among the first who helped to undertake a comprehensive census of the rhino in 1948, a year after India's independence (Rangarajan 2001:87). Since then more censuses took place to estimate the number of rhinos. Lee Marriam Talbot, representing Survival Service of the International Union for the Protection of Nature, visited Kaziranga in 1955.<sup>72</sup> The first extensive census of the sanctuary's varied wildlife distribution was carried out in 1966. These censuses shifted the focus essentially from rhinos to other animals. The Forest Department conducted three more censuses between 1972 and 1984, and began to emphasise on the general habitat.<sup>73</sup> While undertaking these censuses the Forest Department did not integrate any scientific methodology. A mere account of footprint marks came to replace the existing advances made in animal censuses. More importantly, there was no place for a protracted debate on the technologies, unlike the case of tiger census in the post-1990s that needed to be



implemented for mapping the rhino habitat.

The tract of dense forest coverage that once existed between the Brahmaputra River and the Karbi Hills had been fragmented due to the land reclamation that took place in the later decades of the nineteenth century. This apparently brought some major changes in the general ecology of the area. Slow growth of peasant cultivation acquired a serious dimension. Added to that was the recurrent flood, which had a significant impact on soil erosion and habitat loss to the park. This had considerably reduced the migration and movement of the animals. To overcome these new challenges the park administration was forced to protect and add new areas to the existing area of the park. The newly added areas were characteristic of rapidly shifting landscape, with highly variable forest growths. Such was the pressure to push forward the conservation programme, that by 2008, the Assam Forest Department had protested against major players in the region's tea economy. The department claimed that pesticide management of these neighbourhood tea gardens had emerged as a serious deterrent to the lives of many animals living in the park. Once declared a sanctuary, in the next quarter of a century, the KNP engaged several layers of experiments in protecting its natural endowments. Not only had it endeavoured to keep the numbers of its one-horned rhino species in spiralling order, but also experimented with the diversification of its natural biology. In the 1950s, the department tried to expand its northern boundary, which was comparatively free from the pressure of agrarian expansion, but surrounded by the river Brahmaputra. These areas were suitable for the rapid growth of grass and closer to water-bodies and generally it was believed that it would ensure the habitat for the rhinos. Further, the department would hardly need to negotiate with several levels of agrarian rights in these fluctuating sand bars.<sup>74</sup>

Since the early twenty-first century the park management and wildlife conservationists in the province often came into conflict with several state-sponsored projects, which they argued had worked as deterrents to the well-being of the parks and inhabitants. One of the crucial dimensions of this conflict was the national highway which ran across the park causing layers of threat to the animals. The common fact was that although the park was situated only in the forests close to the river Brahmaputra and to the northern bank of the highway which ran in the east and west direction, animals crossed over to the southern side of the road which also provided them with ample food. The situation normally became more recurrent during the rainy and flood-prone season. This resulted in huge political articulation to change the route of the highway. Such demands had strong support from the state civil society and the general political class.

Since then there was a long journey and there grew a considerable number of wildlife parks or sanctuaries. In the post-independence period, the state took the initiative, albeit fragmented, in creating wildlife awareness. Soon the sanctuary attracted the attention of the wildlife conservationist from various international institutions. Since the 1970s there was a growing participation of the new generation of wildlife

enthusiasts and the wildlife question got more prominence in the vernacular press. They came from different backgrounds, unlike their counterparts in the Forest Department. Many of them had professional expertise in wildlife preservation. Universities and various research institutions, often with international collaboration, had come to redefine the agenda for wildlife conservation. Since then a diverse and complex ecosystem played a crucial role in the emergence of the park as a key place and diverse wildlife was noticed by several scientists (Rahmani, Narayan, Sankaran, & Rosalind 1988, Divekar, Mohapatra, & Shekar 1980, Talukdar 1996). Meanwhile, despite this corrective attitude, decades of exclusive emphasis on the selective notion of preservation of the specific species came to have a serious impact on the ecological diversity of the park.<sup>75</sup>

### NATIONAL HERITAGE AND WILDLIFE CONSERVATION

Till the early 1930s the Kaziranga game sanctuary was hardly visited by any tourist, largely unheard of by visitors and completely left to itself by the Forest Department. For the foresters it was a place full of swamp and leeches. Gee mentioned that even domestic elephants found it difficult to enter the swampy forests. He also mentioned the attitude of the then British Conservator of Forests was that 'no one can enter the place'. The sanctuary got a facelift during the energetic leadership of A. Milroy, who opened it up for the visitors in 1938. For Milroy such an attempt would refine the relationship between the Forest Department and fauna, which would mean a gradual redefinition of the game reserve. E.P. Gee in one of his first visits to Kaziranga thus wrote:

Two friends and the Range officer accompanied me, and we had a most exciting time on our two riding elephants. When I first saw rhino they appeared to be most improbable-looking and prehistoric-like with their quaint features and thick armour plating. Our party carried two rifles, one on each elephant for self-defence, but this practice of taking defensive weapons into a sanctuary was soon discontinued, and since then I have never taken rifle or gun with me in self defence at any time anywhere in India.

Gradually visitors from other states began to visit the sanctuary. During the financial year of 1938-1939, the game sanctuary collected Rs. 305 in the form of rent for hired elephants and view permits. The visit of the politicians and bureaucrats boosted the morale of the forest staff.<sup>76</sup> During the Second World War there was an increase in the number of visitors. Military personnel across the world visited the sanctuary. However, the visits of the military personnel brought enormous problems to the animals and there were frequent reports of their killing the animals. The sanctuary began to attract wider public attention since then, which acquired further political legitimacy in the post-independent era. A visit by Prime Minister Jawaharlal Nehru in the 1950s was a well-published affair. Despite support from the visitors working as an instrument of publicity, such visits mostly remained highly privileged affairs.<sup>77</sup> The number



of visitors had also increased. Between 1951 and 1955 more than 1200 visitors came to the sanctuary. Along with this, international tourists gradually began to visit the sanctuary and during 1954-1955 their number had reached 170. The addition of a little infrastructural support, like construction of a tourist lodge, provided good support to the cause of the sanctuary. Rules were framed for the visitors. Such rules also opened up scope for hiring elephants for sightseeing or the use of cameras for photography.<sup>78</sup> The early anxieties of E.P. Gee about the prospect of public recreation through the experiment of Kaziranga continued for several decades. It is difficult to provide an accurate picture of the revenue earned during this period. Despite this the effort for attaining a larger space within the larger narrative of the Indian wildlife conservation programme remained at the forefront. Notwithstanding the combined pressure to protect the fauna and sustain its revenue generation by attracting tourists, during this period the KNP became a space to be remembered and visualised as integral to the making of a modern nation-state and also Assamese nationality. A major boost came when the Indian government, in 1984, nominated KNP to be a world heritage site.<sup>79</sup> Defending its nomination the government claimed that 'although Kaziranga has a range of natural values and provides habitat for a number of importance as (sic) the world's major stronghold of the Indian rhino' the Brahmaputra river's fluctuations resulted in spectacular examples of riverine and fluvial processes which also required a strong merit to be nominated as a contender for the world heritage site. Declaration of World Heritage sites also required that the state government put in place a legal mechanism to create a buffer zone to protect its 'southern wet habitat zone'. Despite its early success in gaining recognition as a World Heritage Site, the managers of the park failed to deliver the bureaucratic works. The attraction of tourists to KNP remained a major dilemma for the park management. The participation of local people in the last few decades of the twentieth century, however, began to alter the face of the tourism prospect for the park. Infrastructural support began to take care of the emerging rich class of tourists, both Indian and international. Erstwhile small peasant families, who might have contested the gradual expansion of the park's area, had now entered into the network of tourism-related investment, which had begun to pay off in recent days. However, the attachment of the Assamese society, the Assamese middle class in particular, to the larger well-being of the KNP and the rhino, needs to be qualified. It is equally true in the case of the rhino. The one-horned rhino became a state emblem in 1948.<sup>80</sup> Official acceptance of the rhino as a state symbol of Assam gave further political credibility to the cause of the rhino. However, till the 1960s, the apprehension of the Assamese middle class against creating a rhino habitat was well-known. Such an apprehension was well illustrated by an observation of Milroy, who in 1932 commented while asking for more protection for rhinos in Kaziranga,

Anything in the nature of a Public park on the lines of the Kruger National Park would be out of the question unless it was under imperial control, because if the Assamese taxpayer ever wants anything of this sort, he will certainly demand that

all predatory and dangerous animals be removed before he disports himself in it (Milroy 1932:28-40).

The case of the historical attachment of Assamese nationality to the rhino and KNP becomes much weaker if we take into account the contemporary history of Assamese literature. It is difficult to come across any literary or creative piece on Kaziranga appreciating the cause of wildlife conservation. However, over the years, reinforced both by the idea of rarity and its international recognition, the one-horned rhino has come to be seen as unique to the region (Schama 1995, Rangarajan 2008).<sup>81</sup> Such an emphasis continues to ignore the well-known fact that this species is also present in the Indian Terai region and forests of Nepal. At the same time contemporary Indian experiences of wild animals, specific to the regional habitat, runs in contrast to the one-horned rhino experience of Assam.<sup>82</sup> For cross section of socio-political interests, by speaking on behalf of the animal, this rarity and uniqueness is appropriated to derive their political legitimacy; and, more essentially, the animal and its rarity become integral to the larger narrative of the Assamese nationalistic identity; and finally, the rarity of an animal coalesced in the spatial identity of the people and a region.

It so happened that a proposal for translocation of the rhino from the Pabitora wildlife sanctuary to Dudhwa National Park in Uttar Pradesh was strongly resisted by the All Assam Student Union (AASU) in the 1980s. Support for this opposition came from several political parties too.<sup>83</sup> The opposition of rhino translocation was primarily based on the idea that rhino was exclusive to the region and thus an essential ingredient of the Assamese nationality. Simultaneously, this political resistance was the growth of the political discourse on post-independent Indian internal colonialism (Misra 1980). Exploitation of natural resources came to be seen as an instrument of the continuation of this phase of Assam's career in being exposed to colonialism. The All Assam Students' Union (AASU)-led agitation of not allowing natural resources like crude oil from the state to other Indian provinces was part of this larger political movement. The case of the one-horned rhino also best fitted into this paradigm.

## CONCLUSION

Almost after a century of experimentation, KNP is now the contested account of success of wildlife conservation. The success of the conservation project of Kaziranga, rather than a mere technological explanation, based on the social and political history of the region there was more than that. The government and conservationists have no hesitation in ascribing success to this complex narrative of wildlife conservation. The one-horned rhino, though not an exclusive fauna of KNP, has been projected as the best example of protection and survival. The paradigm of militarised protection of its boundary has been seen as central to this success story, in complete contrast to experiments like that of the Manas National Park or the Chitwan Park.<sup>84</sup>

The KNP and the history of conservation, variously

appropriated by both the Indian wildlife conservation programme and the Assamese middle class, is not a narrative of a linear growth of success. The park went through three distinct phases of evolution, broadly arranged into the pre-1930s, 1930s to 1970s and post-1970s, before reaching the present status. While the conservation mechanisms central to these phases often overlapped, what became distinctive of these three phases were their distinguishing ideological contours of conservation. It is now clear that in its first phase the conservation story began with both fauna conservation and restricted game playing a collective role in shaping the growth of KNP. The second phase integrated it with a larger science of conservation and continued to emphasise on the policy of exclusion. A conservation framework based on safeguarding a complex habitat eco-system could hardly find space in the ideological imperative. The last and present phase is more driven by larger nationalistic political exigencies coupled with a curious case of the science of conservation. Over the years the ideological paradigm of wildlife conservation in the Kaziranga National Park had changed significantly. Since its establishment as a game reserve in the early twentieth century, and gradually being given the status of a national park, the KNP was also exposed to various pressures. It had to cope up with the pressure from the livelihood practices of the local peasants dependent on these forests. While, on the one hand, the neighbouring peasant society resisted the formation of any such sanctuary early in the twentieth century, peasants still tried to manipulate various protectionist schemes; those who were dispossessed by this park could gradually become marginal partners through an emerging tourism-based economy. It is too early to assess whether it will have any significant bearing in the conservation agenda of Kaziranga.

The idea of larger social participation and restoration of the lost grassland habitat, which played a key role in the revival of one-horned rhinos, is completely missing from such narratives.<sup>85</sup> The story of rhino conservation, for being the fact that the rhino was an animal of low-land grassland, and thus restoration of grasslands, has another co-traveller, on a different plank, from the other part of the American continent, that is, the example of the American Bison (Lott & Greene 2003, Zontek 2007). While bureaucratisation of the rhino conservation programme continued, the Assamese middle class had asserted their association with the KNP and its rhinos as organic to their own trajectory. The association of the Assamese middle class makes a good cause into the making of a protectionist policy towards Kaziranga as well as a meaningful place in Assam's social history. The vernacular press, a rather strong instrument in Assamese middle class politics, meticulously kept articulating the cause of the well-being of the park. The gradual arrival of the tourism-based economy into the neighbourhood contributed to the idea of resource generation. This had, however, not resolved the complex issues of agrarian practices as a source of livelihood and independent existence of the park. Nevertheless, a park management, unwilling to resolve this complex problem, is now under the scrutiny of several international bodies, which

have significant control in the affairs of the world wildlife conservation programme.

### Acknowledgements

An earlier version of this article was presented in the Department of History, University of Delhi, and ECMSAS, Manchester, in July 2008. I am grateful to all the commentators for stimulating discussion. Special thanks to Mahesh Rangarajan, Veena Naregal and Joëlle Smadja whose comments had helped to emphasise some of the crucial arguments. I could handle safely the complexities of the social and political history of Assam with support from Prodeep Khatoniar and Rajen Saikia. Suggestions of the two referees of Conservation and Society were of crucial help in giving a new thrust to the article.

### Notes

1. The best example is the Yellowstone National Park in USA. The case of national park in USA has been best illustrated in Conservation Foundation (1972).
2. There was a sizeable organized sport in colonial India. Various clubs took the lead in organizing such sports. The Calcutta Tent Club established in 1862, Bart claims as the oldest such club.
3. Though there were no straightjacket stratification we can categorize the hunters in the early 20th century Assam into two groups. One group practiced hunting to earn a livelihood while the other group preformed it for social status and other necessary social 'causes'.
4. For his hunting life see, Tamuli 2003.
5. Many others also left behind their accounts of hunting, See, Barua (1974).
6. The best illustrative example of their engagement with the game is Big Game Shooting in Eastern and North Eastern India by Maharaj of Cooch Bihar
7. Members of the Gauripur Zamindari kept elaborate records of their shikars.
8. For the best example of such hunting expeditions see, Lahiri Chaudhury 2006. The well-known Bengali writer Leela Majumdar's father who was a surveyor in British Assam had eloquently penned down his memories of pig hunting. See, Rai 1956. I am thankful to Gautam Bhadra for providing me with this information.
9. For a brief account of the various tribes attitude to the wildlife see, sarit chaudhuri, Indian Folklife, folk belief and resource conservation: Reflections from Arunachal Pradesh, January, 2008.
10. Act VIII of 1912. Annual Report on the Forest Administration of Assam (hereafter Annual Report) 1913-14, para. 199.
11. Annual Report, 1920-21, para. 238.
12. Annual Report, 1920-21, para. 238 and 47.
13. Milroy became conservator of the Assam Forest Department in 1933 and remained in that position till 1936. Papers of Arthur John Wallace Milroy (1883-1936), Mss Eur D1054, OIOC, BL.
14. ASP, No. 35-46, Revenue-A, February 1913, (ASA).
15. Annual Report, 1916-17, para. 221.
16. For details of the Nilgiri Game Association, see, Stebbing 1909.
17. Letter from J.C. Arbuthnott, Commissioner of Assam Valley to the Secretary to the Chief Commissioner, Assam, 4 November 1902, ASP, No.75-134, Revenue-A, September 1905 (ASA). The names of Lord Curzon and Lady Curzon are commonly associated with the preservation of rhino in Kaziranga though none of them played a central role in the story of Kaziranga.
18. In Bengal the killing of the rhino was already prohibited.
19. Letter from F.J. Monahan, Secretary to the Chief Commissioner, Assam to the Commissioner of the Assam Valley Districts, No. 12, Forests-

- 1283R, Shillong, 15 March 1904, ASP, No. 75-134, Revenue-A, September 1905. (ASA).
20. Ibid. J. Donald, Deputy Commissioner of Sibsagar wrote to the Commissioner, Assam Valley that he spoken to 'several gentlemen who are acquainted with the tract, and have been shooting therein, and all are of opinion that the tract should be certainly be reserved in order to prevent the extermination of the rhinoceros'.
21. 'The flesh of antelope and rhinoceros give my beloved (kali) for five hundred years' Quoted in Wilkins 2001:262. The Kalika-Purana composed c10<sup>th</sup> century in Assam is one of the 18 Upapuranas. The text has been critically commented upon by several authorities.
22. The Monthly Review January to April, 1839, Vol. I
23. The Asiatic Journal and Monthly Register for British and Foreign India, China, and Australia, 1836, May-Aug 1836. May, p. 30. See, also M'cosh 1975.
24. News Item, Anil Roy Chaudhuri, Sadin, 2008.
25. The entry of Marwari traders in the rhino trade has been mentioned in several Forest Department reports and has been discussed elsewhere in this essay.
26. For a comprehensive understanding of habitat of one-horned rhino see, Laurie 1978.
27. The case of American Bison has been well-illustrated in Moulton 1995.
28. Letter from Secretary to the Chief Commissioner of Assam to J.C. Arbuthnot, Deputy Commissioner, Sylhet, No. 2160Misc, 9628G, Shillong, 18 December, 1902, File No. Revenue-A, September, 1905, nos. 75-134 (ASA).
29. Ibid. The tracts thus identified were mostly without cultivation, the official argument was on the line of chief commissioner's wishes.
30. P.R.T. Gurdon, the deputy commissioner of Kamrup in fact argued that if such a reserve was to be formed the authority to issue shooting licences be only invested with the deputy commissioners. Quoted in Letter from J.C. Arbuthnot to the Secretary to the CC, Assam 28 August, 1903, Jowai, no. 77 in File No. Revenue-A, September, 1905, nos. 75-134 (ASA).
31. Secretary to the CC, Assam to Commissioner, Assam Valley, 15 March, 1904, Shillong, no. 12 Forests-128R, no. 79 in File No. Revenue-A, September, 1905, nos. 75-134 (ASA).
32. Curzon wrote 'The rhino is all but exterminated save in Assam'. Curzon's reply to Burma Game Preservation Association, 23 September, 1901, Home Public Deposits, no.15, August, 1904, National Archives of India. Also see, Curzon 1906:435-440.
33. Quoted in Adams 2004:110. For understanding the changing perspective of British Raj, specially Lord Curzon, towards the wildlife, see, Saberwal, Rangarajan and Kothari 2001:17-23.
34. A. Playfair, the deputy commissioner of Sibsagar, argued that 'it is a remarkable fine place for a grazing reserve such as has been discussed by the government on more than one occasion, but it is not, to my mind, an ideal one for wild animals, though certainly it might become so by the growth of jungle in the course of time.' A. Playfair, Proceedings in connection with the proposed addition to the Kaziranga Game Reserve, no. 186, 29 July, 1915, in File No. Revenue A, nos. 181-214, September 1917 ASP, (ASA).
35. Letter from P.R.T. Gurdon, commissioner, Assam valley districts to Under-Secretary, Revenue Department, Chief commissioner of Assam, no. 6510G, Gauhati 3 October, 1912 in Extension of the Kaziranga Game Reserve, ASP, Revenue -A, nos. 37-57, May, 1914.
36. Petition of villagers against game sanctuary, Letter from Conservator of Assam to Second Secretary, Government of Assam, no. A-212, 6 December, 1924, in Revenue-Forests, June 120-128, 1925 .
37. Annual Report, 1931-32, para. 25, p. 5; Gee 1952.
38. The jail term was for six months and an fine which was up to Rupees one thousand.
39. One Bhimbahadur Chetri, regarded by the department as 'keen and energetic' game watcher was killed in the Sonai-Rupai Sanctuary. Annual Report, 1938-39, para. 119.
40. Annual Report, 1938-39, p. 19.
41. Annual Report, 1950-51, para. 155.
42. For a best illustration of varieties of use of rhino and its anatomy, see, Ellis 2005:119-132.
43. Report on Inspection of Manas Reserve no. 368, ASP, No. 286-294, Revenue Department, Forest Branch, Forest B, June 1931 (ASA).
44. Milroy 1932:28-40. Writing decades later E.P. Gee also confirmed that understanding.
45. Gee confirms Milroy's observation on rhino's utility: 'Apart from the horn, almost any part of the body of a rhino can be marketed. Even the urine is drunk by some persons, tiny pieces of hide and bone are worn as charms against sickness, and the meat is believed by some to be not only palatable but also a combined passport and ticket to the land of eternal bliss'. E.P. Gee, The Rhino of Kaziranga, The Wildlife of India, 1964.
46. Milroy even suggested how in USA buffalo-poachers were liable to be shot at sight in the Yellowstone Park but put on record of his doubt of whether 'such measures would be approved of in backward Assam'. Milroy 1932:28-40.
47. Government Notification No. 2594-G.J., 1 May 1939. This order came into retrospective effect from 1 June 1938. This was made also applicable to the excluded areas. Annual Report, 1939-40, para. 32.
48. Annual Report, 1938-39, p.19.
49. The Indian government also admitted of the emergence of complex rhino horn trade-network to facilitate such trades. See, Speech by Saifuddin Soz, Minister of Environment and Forests, Rajyasabha, 8 August, 1997 and 26 July, 1997.
50. Letter from W.F.L. Tottenham, Officiating of Forests, Eastern Circle to the Chief Secretary, CC, Assam, 29 January 1916, Rev, A, No. 181-214 (ASA).
51. Statement of Domai Ahom, Forests A, January 1908 (ASA).
52. A. Playfair, the deputy commissioner of Sibsagar admitted that the Miri peasants who had cultivation inside the newly expanded areas would have to move to far away places. The administration, the deputy commissioner had no hesitation in asserting that, could not take the responsibility of locating the place for their cultivation.
53. Annual Report, 1945-46, para. 127.
54. Petition Grazing Association Bokakhat to the Conservator of Forests, Assam, December, 1959, File no. For/WL/778/59 (ASA).
55. The IBW in a recommendation passed in 1965 strongly prohibited as far as possible grazing of domestic animals in sanctuaries. See, Gee 1967:339-341.
56. Letter from P.D. Stacey, Senior Conservator of Forests, Assam to the Secretary, Department of Agriculture, Assam government, no.c/769, 5 January 1955, File no. For/WL/226/55 (ASA).
57. The issue has been addressed by me elsewhere.
58. Wildanimals were still shot inspite of various regulations. For instance, the following statement of Wild Animals Shot in Assam during 1945-9 prepared from Annual Reports show the gravity of the problem. Accordingly, though it is a highly conservative estimate, Tiger-182, Tigress-26, Leopard -115, Wild cats-54, Cheetah-8, Wild dog-131, Himalayan black bear-2, Sloth bear-65, Wild elephant-93, Rhino-9, Mithan-6, Wild buffalo-12, Goral-21, Barking deer-471, Swamp deer-31, Spotted deer 97, Hog deer-239, Pigs—289, Porcupines-116, Wild monkeys-237, Ape-32, Squirrer-243, Jackels-25, Hares-10, Crocodile-2, Python-103, Turtle-422, Fruit Pigeon-280, Horn bill-8 were killed during this period.
59. Annual Report, 1948-49, para. 130.
60. Report of D. Baruah, Divisional Forest Officer, Sunai-Rupa Sanctuary, Annual Report, 1940-41, para. 150.
61. File no. Forest/WL/178/59, 1959, (ASA).
62. For instance the Assam Forest Department sold one rhino to Cairo Zoo for Rs. 20,000.



63. Chief Minister's Fortnightly Letters to the Prime Minister, File No. CMS 4/54, 1954, (ASA).
64. The bill was introduced by the Forest Minister Ramnath Das, a Congress member. Though it was passed without any opposition some lighter form of opposition came from leading CPI member Gaurishankar Bhattacharya.
65. Socialist leader, Hareswar Goswami and CPI leader Gaurishankar Bhattacharya was amongst those who expressed their doubt about the utilitarian objective of its preservation.
66. Annual Report, 1954-55, chapter viii, para. 150.
67. The most well-known case of such resistance from the Assam Forest Department was that of Thomas Foote, University of Chicago who was denied a permission to study rhino in Kaziranga. Such denials emerged mostly due to apprehensive character of bureaucracy towards other international observation.
68. For understanding the global dynamics see, Lewis 2003:233-235.
69. Act IX of 1969 See, The Assam Gazette, 4 September 1968.
70. Notification no. For/WL/722/68 dated 11 February 1974, The Assam Gazette, March 27, 1974.
71. Annual Report, 1944-45, para. 98.
72. Note by Deputy Conservator of Forest, Memo no. A 76, May 25, 1955, Shillong.
73. The census taken in March 1974 took into account a large number of animals.
74. Memo by DFO, Sibsagar to Deputy Commissioner, Darrang no. B/2036-38 Jorhat, 4 April, 1950.
75. The point has been succinctly made by Gautam Narayanan in a paper presented in the Department of Humanities and Social Sciences, IIT Guwahati, 2007.
76. Before independence, many politicians and colonial administrators including forest ministers of Assam visited Kaziranga many a times. The governor of Assam visited Kaziranga during 1939. It was mentioned that during the two mornings of his stay 17 rhino were seen at close quarters, in addition to buffalo, sambhar, swamp, and hog deer, pig, otter and a variety of birds. Annual Report, 1938-39, p. 19.
77. Expenses for several visits made by members of Indian political as well as bureaucracy in 1954-55 were borne by the Assam government. For instance the visit of M. Imam, daughter of Justice Sayeed Ali, chairperson of States' Re-organisation Committee was treated as state visitor and expenses were incurred from the governmental account.
78. Annual Report, para. 149-153, 1954-55.
79. Nomination To-The World Heritage List, Convention concerning the Protection of the World Cultural and Natural Heritage Retrieved from on April 23, 2008, [whc.unesco.org/archive/advisory\\_body\\_evaluation/337.pdf](http://whc.unesco.org/archive/advisory_body_evaluation/337.pdf).
80. Since 1948 the public sector undertaking Assam State Transport Corporation used this emblem widely and thus helped the popularity of the symbol too. I am thankful to Kumudeshwar Hazarika for sharing me this date.
81. Simon Schama has shown how the Polis Bison came to be integrally linked with the emerging nation in the 1920s.
82. Mention may be made of lions in Gir in Junagadh, elephant in Mysore and white tigers in Bandhavgarh National Park Rewa in Madhya Pradesh.
83. Member of Indian parliament Robin Kakati raised a question seeking to know the motive of Indian government for translocation of rhinos from Assam to Uttar Pradesh. Speech by Robin Kakati, 1 March 1984, Proceedings of Rajyasabha. Essays were published in Sanctuary Asia even suggesting that such translocation was going to be a failure due to absence of similar eco-system. See, Sanctuary Asia, vol. iv, no.3, 4, 1984.
84. The best illustration of Chitwan case is that of Dinerstein 2003.
85. Introducing the Assam Rhinoceros Preservation Bill in 1954 the State's Forest Minister told the assembly '...circumstanced as we are, Assam is proud for her heritage of wild life, particularly for the one-horned Rhino' in Assam Gazette, December 1954.

## REFERENCES

- Adams, W.M. 2004. *Against extinction: The story of conservation*. London: Earthscan.
- Baden Powell Bart, (Date unknown). *Pig-sticking or hog hunting, A complete account for sportsmen and others*. London.
- Bannerji, G. 2001. Habitat use by the Great India One-horned rhino (Rhinoceros unicornis) and other sympatric species in Kaziranga National Park, Assam, India. M. Sc. Dissertation. WII, Dehradun.
- Barua, P. and Das B.N. 1969. *Kaziranga: The Rhino-land in Assam*. I U C NN R, Assam Forest Department.
- Barua, M. and Sharma, P. 1999. Birds of Kaziranga National Park, India. *Forktail* 15: 47-60.
- Barua, L.S. 1974. *Shikar of Assam*. Guwahati.
- Barua, P. and B.N. Das. 1969. *Kaziranga: The Rhino-land in Assam*, I U C NN R, Assam Forest Department.
- Baruah, P. and Goswami, D.C. *Satellite study of vegetation cover and wetlands of Kaziranga National Park (Assam)*. ARSAC.
- Biswas, T., V.B. Mathur and V.B. Sawarkar. 2002. Status and Distribution of Hog Deer (*Axis porcinus*) in India. WII report.
- Brener, B.A.E. 1998. An Anti-poaching strategy for the greater one-horned rhinoceros of Kaziranga National Park, India. M. Sc. Dissertation, University of Calgary, Canada.
- Ellis, R. 2005. *Tiger bone & rhino horn: The destruction of wildlife for traditional chinese medicine*. Island Press.
- Lahiri Chaudhury, D.K. 2006. *A trunk full of tales: Seventy years with the Indian elephant*. Delhi: Permanent Black.
- Choudhury, P.L. 1988. *Sikar-Nikar*. Guwahati.
- Champion, H.G. and H.K. Seth. 1968. *Forest types of India*. Delhi: Government of India.
- Conservation Foundation. 1972. *National parks for the future: An appraisal of the national parks as they begin their second century in a changing America*. Washington.
- Curzon, G.N. 1906. *Sir Lord Curzon in India: Being a selection from his speeches as viceroy and Governor-General of India, 1898-1905*. Macmillan.
- Das, R.K. 2005. *Kaziranga: Leaves from a forester's notebook*. Guwahati: Spectrum Publications.
- Lott, D.F. and H.W. Greene. 2003. *American bison: A natural history*. California: University of California Press.
- Zontek, K. 2007. *Buffalo nation: American Indian efforts to restore the bison*. USA: University of Nebraska Press.
- Deva Goswami, P. Banaria Moh Rakhsar Guri Katha. *Abawahan* 26(10): 26-29.
- Deb Roy, S. 1993. *Rhino conservation action plan*. Ministry of environment and forests. Delhi: Government of India.
- Dinerstein, E. 2003. *Return of the unicorns: Natural history and conservation of the greater-one horned Rhinoceros*. Columbia.
- Dinerstein, E. and G.F. Mccracken. 1990. Endangered greater one-horned rhinoceros carry high levels of genetic variation. *Conservation Biology* 4(4): 417-422.
- Divyabhanusinh. 2006. *The end of a trail: The Cheetah in India*. Delhi: Oxford University Press.
- Divyabhanusinh. 2005. *The Story of Asia's Lions*. Mumbai: Marg Publications.
- Divekar, H.K., K.K. Mohapatra and P.B. Shekar. 1980. Some observations on wild buffalo, *Bubalus bubalus* Linn. in Kaziranga National Park, Assam. *Journal of the Bombay Natural History Society* 79: 188-190.
- Dutta, A.K. 1991. *Unicornis: The great Indian one-horned rhinoceros*. Delhi: Konark Publishers.
- Gee, E.P. 1952. The great Indian one-horned Rhinoceros. *Oryx* 1(5): 224-227.
- Gee, E.P. 1952. The Great Indian One-Horned Rhinoceros. *Journal of the Bombay Natural History Society* 25(4): 69.
- Gee, E.P. 1964. *The Wildlife of India*. New York: Dullon and Co.



- Gee, E.P. 1967. The Management of India's wild life sanctuaries and national parks. *Journal of Bombay Natural History Society* 64(2): 339-341.
- Gokhale, N. and S. Kashyap. 2005. *Kaziranga: The Rhino century*. Guwahati: Kaziranga Centenary Celebration Committee.
- Islam, S. and B.K. Talukdar. 1996. Changing Wetland Habitat in Kaziranga National Park: A case study. *Zoos' Print*, XI (7): 17.
- Johnsingh, A.J.T. 1991. Rajaji National Park. *Sanctuary Asia* 11: 14-25.
- Karanth, K.U. and I.D. Nichols. 1998. Estimation of tiger densities in India using photographing captures and recaptures. *Ecology* 79(8): 2852-2862.
- Kushwaha, S.P. and N.V. Unni. 1986. Applications of the remote sensing techniques in forest cover monitoring and habitat evaluation: A case study of Kaziranga National Park Assam.
- Kushwaha, S.P. and N.V. Unni. 1986. Applications of the Remote Sensing techniques in forest cover monitoring and habitat evaluation: A case study of Kaziranga National Park Assam.
- Kushwaha, S.P., P.S. Roy, A. Azeem, P. Boruah. and P. Lahan. 2000. Land area change and rhino habitat suitability analysis in Kaziranga National Park, Assam. *Tiger Paper* XXVII(2).
- Lahan, P. and R. Sonowal. 1973. Kaziranga wildlife sanctuary. Assam. *Journal of Bombay Natural History Society* 70(2): 245-278.
- Lahan, P. 1993. Present status and distribution of The Indian Rhinoceros (*Rhinoceros unicornis*) in the wild in Assam and its habitat. Assam: Forest Department, Government of Assam.
- Lewis, M. 2003. *Inventing global ecology: Tracking the bio-diversity ideal in India 1945-1997*. Delhi: Orient Longman.
- Laurie, W.A. 1978. The Ecology of the greater one-horned rhinoceros. Ph.D thesis, University of Cambridge.
- M'Cosh, J. 1975. *Topography of Assam*. (first print Calcutta, 1837), Delhi.
- Martin, E.B. 1980. *The International Trade in Rhinoceros Products: A Report for the World Wildlife Fund (WWF) and International Union for Conservation of Nature and Natural Resources (IUCN)*. World Wildlife Fund, International Union for Conservation of Nature and Natural Resources, IUCN/WWF.
- Martin, E.B. and L. Vigne. 1991. Assam's rhinos face new poaching threats. *Oryx* 25(4): 215-221.
- Menon. V. 1996. *Under Siege: Poaching and protection of greater One-horned Rhino in India*. Traffic Network Report.
- Milroy, A.J. 1932. Game Preservation in Assam. *Journal of the Society for the Preservation of the Fauna of the Empire*, new series (xvi): 28-40.
- Misra, M.K. 2005. Improving protection and building capacity off staffs at Kaziranga national park. *Technical Report No.4*. UNESCO-IUCN-WII.
- Misra, T. 1980. Assam: A colonial hinterland. *Economic and Political Weekly* 15(32): 1357-1359 and 1361-1364.
- Moulton, M. 1995. *Wildlife issues in a changing world*. 2<sup>nd</sup> edition. CRC Press.
- Muley, P. 2001. Genetic and morphometric studies to differentiate between wild and domestic Asian water buffaloes (*Bubalus bubalis*) and their hybrids in Kaziranga National Park. PhD. Dissertation. University of Wisconsin-Madison, USA.
- Nath, D. 2004. *Goalparia Lokasamskriti*. Guwahati.
- Parihar, J.S., S. Panigrahy and J.S. Parihar. 1986. Remote sensing based habitat assessment of Kaziranga National Park. In: *Wildlife habitat evaluation using remote sensing techniques*. (eds. Kamat, D.S. and H.S. Panwar). Pp. 157-164. Dehradun: Indian Institute of Remote Sensing and Wildlife Institute of India.
- Phukan, T.R. 1983. *Sikar Kahini*. Guwahati.
- Rahmani, A.R., G. Narayan., R. Sankaran and L. Rosalind. 1988. *The Bengal florican: Status and ecology: Annual Report 1986-87*. Mumbai: Bombay Natural History Society.
- Rangarajan, M. 1996. *Fencing the forests: Conservation and ecological change in India's central province*. Delhi: Oxford University Press.
- Rangarajan, M. 2001. *India's Wildlife history: An introduction*. Delhi: Permanent Black.
- Rangarajan, M. 2008. Region's Pride, nation's honour, Gir's Lions on the cusp of history'. In *The Lion's of India*. Divyabhanusinh ed. Delhi.
- Rai, P.R. 1956. *Baner Khabo*. Calcutta.
- Rodgers Alan, W., H.S. Panwar and V.B. Mathur. 2002. *Wildlife protected area network in India: A review (executive summary)*. Dehradun: Wildlife Institute of India.
- Ripley S.D. 1952. Territorial and sexual behavior in the great Indian rhinoceros: A speculation. *Ecology* 33(4): 570-573.
- Rowntree, J. 1981. *A Chota Sahib: Memoirs of a forest officer*. Padstow: Tabb House.
- Sawarkar, V.B. 1995. *A manual for planning wildlife management in protected areas and managed forests*. Wildlife Institute of India.
- Saberwal, V.K., M. Rangarajan and A. Kothari. 2001. *People, parks, and wildlife: Towards coexistence*. Delhi: Orient Longman.
- Saberwal, V.K. and M. Rangarajan. 2003. *Battles over nature: Science and the politics of conservation*. Delhi: Orient BlackSwan.
- Saikia, R. 2003. *Social and economic History of Assam*. Delhi: Manohar.
- Saikia, A. 2005. *Jungles, reserves, wildlife: A history of forests in Assam*. Guwahati: Wildlife Welfare Trust of Assam.
- Schama, S. 1995. *Landscape and memory*. New York: Vintage Books.
- Sehgal, B. and R. Barthakur. 2008. *The Kaziranga inheritance*. Mumbai: Sanctuary Asia.
- Sharma, D.C. 2006. Relocation planned for one-horned rhino. *Frontiers in Ecology and the Environment* 4(3): 120.
- Sharma, R. 2002. Conservation of one horned Rhinoceros in Assam? *Strengthening of enforcement & Legal proceeding, in illegal trade & other offences*. A report.
- Shrivastava, R.J. 2002. Natural Resources uses and park-people relations at Kaziranga National Park and world heritage site, India. M.Sc. Thesis, Florida International University, Miami.
- Shrivastava, R.J. and J.T. Heinen. 2005. Migration and Home Gardens in the Brahmaputra Valley, Assam, India. *Journal of Ecological Anthropology* 9(1): 20-34.
- Shrivastava, R. J. and J. Heinen. 2007. India: Implications for conservation and development planning: A microsite analysis of resource use around Kaziranga national park. *The Journal of Environment Development* 16: 207.
- Spillet, J.J. 1966. A report on wildlife surveys in north India and southern Nepal: The Kaziranga wildlife sanctuary, Assam. *Journal of the Bombay Natural History Society* 63: 494-533.
- Spillet, J.J. 1966. A report on wildlife surveys in north India and southern Nepal. *Journal of the Bombay Natural History Society* 63(3): 492-628.
- Stebbing, E.P. 1909. The Nilgiri game and fish association. *Indian Forester* 35: 121-122.
- Stracey, P.D. 1963. *Wild life in India: Its conservation & control*. New Delhi: Government of India.
- Tamuli, L.N., ed. 2003. *Tarun Ram Phukan Rachanavali*. Guwahati: Assam Publication Board.
- Talukdar, B.K. 1995. Pelicans fail to nest as normal at Kaziranga National Park in 1994. *Oryx* 29(3): 157.
- Talukdar, B.K. 1996. Status of Swamp deer in Kaziranga national park. *Deer Specialist Group News* 13: 11-12.
- Thapar, V., ed. 2003. *Battling for survivals: India's wilderness over two centuries*. Delhi: Oxford University Press.
- Vigne, L. and E.B. Martin. 1989. Kaziranga's calamity: A new threat to the Indian Rhino. *Oryx* 23: 124-125.
- Vigne, L. 2009. Traders from Nagaland threaten Assam's rhinos. *International Zoo News* 56(3): 166-167.
- Webber, T. 1902. *The forests of upper India and their inhabitants*. London: Edward Arnold.
- Wilkins, W.J. 2001. *Hindu mythology, vedic and puranic*. Kessinger Publishing Co.