Park, People and Politics:
An Environmental History of the Kaziranga National Park

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Declaration

I hereby declare that this thesis titled **"Park, People and Politics: An Environmental History of the Kaziranga National Park"** is the outcome of my own research carried out in the Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati, India, under the supervision of Arupjyoti Saikia in the Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati, India.

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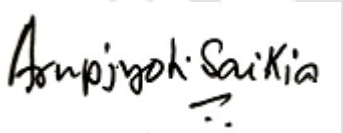
Certificate

This is to certify that the thesis titled **"Park, People and Politics: An Environmental History of the Kaziranga National Park"**, submitted for the Degree of Doctor of Philosophy by Biswajit Sarmah, student at the Department of Humanities and Social Sciences, Indian Institute of Technology, Guwahati, embodies research work carried out under my supervision. The present thesis or any part thereof has not been submitted anywhere else for award of any degree or diploma.



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Abbreviations

AGP	Assam Government Press
ALA	Assam Legislative Assembly
ALAD	*Assam Legislative Assembly Debates*
ANPA	Assam National Park Act 1969
ASA	Assam State Archives
ASP	Assam Secretariat Proceedings
ASPr	Assam Secretariat Press
ASPO	Assam Secretariat Printing Office
AVD	Assam Valley Districts
BNHS	Bombay Natural History Society
EBASPO	Eastern Bengal and Assam Secretariat Printing Office
CM	Chief Minister, Assam
CF	Conservator of Forests, Assam
CM	Chief Minister, Assam
CITES	Convention on International Trade in Endangered Species
DC	Deputy Commissioner
DCHB	*District Census Handbook*
DFO	Divisional Forest Officer
DCF	Deputy Conservator of Forests
DIG	Deputy Inspector General of Police
DoE	Department of Environment, Government of India
DSP	Deputy Superintendent of Police
FD	Forest Department, Assam
FM	Forest Minister, Assam
GHC	Gauhati High Court

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GoA	Government of Assam
GoI	Government of India
IUCN	International Union for the Conservation of Nature
JBNHS	*Journal of the Bombay Natural History Society*
KNP	Kaziranga National Park
KWS	Kaziranga Wildlife Sanctuary
LRAA	*Land Revenue Administration Report of Assam*
LRAVD	*Land Revenue Administration Report of the Assam Valley Districts*
NAI	National Archives of India
PA	Protected Area
PRFA	*Progress Report of Forest Administration in the Province of Assam*
RAPA	*Report on the Administration of the Province of Assam*
RD	Revenue Department, Assam
RM	Revenue Minister, Assam
RO	Range Officer, Forest Department, Assam
RRC	Rhino Resource Centre
SC	Supreme Court of India
SDC	Sub-deputy Collector
SDO	Sub-divisional Officer
SIA	Smithsonian Institution Archives, Washington DC
SPFE	The Society for Prevention of Fauna in the Empire
sq. km	square kilometre
US	Under Secretary, Government of Assam
USF	Un-classed State Forests
WLPA	Wildlife (Protection) Act 1972
WLS	Wildlife Sanctuary
WWF	World Wildlife Fund for Nature

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Glossary

ahu	A rice, broadcast in February-March and harvested before the monsoon.
bathan or khuti	Livestock camp, mainly in the floodplain islands or foothills
bigha	A unit of land measurement. One bigha equals 14,400 square feet or .302 acre.
bil or beel	Lake-like wetland.
boro	A rice, sown/transplanted in the winter and harvested in summer.
chapori	Annually submerged riverine land.
ekchonia patta	Annual land title. Government can annule the renewal if it needs the land.
faringati	Land where peasants grew dry crops. Its meaning changed from highland in the early nineteenth century to include low-lying grassland by the twentieth.
matikalai	A black lentil sown after the rains and harvested in the winter.
mauza	Land revenue assessment unit under a *mauzadar*
myadi patta	Land title issued to a *ryot* for thirty years in the twentieth century
pam	A temporary holding for cultivation away from the permanent dwelling site.
patta	Land title
rupit	Land fit for growing wet-rice land.
ryot	A peasant owing a land title.
ryotwari	A system of land governance where the actual peasant is given the land title.
shikari	Indian hunter.
tauzi	Penalty against encroachment on government land

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Acknowledgment

It is easier said than done to recount and acknowledge all the debt I accumulated in writing this PhD thesis. The simple reason being inspiration and intellectual resources often came from beyond the sphere of my formal research. The Kaziranga National Park's (KNP) sixth addition borders my native village. The addition that forms the park's biggest buffer is a stretch of the Brahmaputra River, containing numerous *tapu*s (river islands). My village does not boast of tourists, resorts, and safaris that gloss the villages near the main entrance of the KNP. Nevertheless, park's denizens do visit us. During heavy floods, the *tapus* are submerged and wild animals seek higher lands. We often wake up to see a couple of wary deer in the farther end of our homestead. The wild boars, on the other hand, do not wait for season and sightings. They just leave the uprooted yam stems as the sign of their visit.

I grew up with two views about the KNP, popularly 'Kaziranga'. The back cover of school textbooks mentioned that the KNP is the home to the Greater One-horned Rhinoceros. On the other hand, the community recounts it as a pasture. When the KNP was suggested as a possible topic for PhD research, it ticked me: how a pasture made way for a heritage site? Innumerable tales—of awe and wonder, losses and gains, collusion and lapses, and sympathy and brutality—etched in my memory drove this research. I am indebted to a large number of people whose stories influenced my views about the *tapu*s and floodplains. Khetradev Sarmah, my father, a peasant, is my key informant to the rural world in the KNP's north. It is through his experience and memory, I peep at the ups and downs, anxieties and aspirations, and ruins and fortunes, people made here.

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I walked through the KNP's neighbourhood. In most instances, I randomly arrived at villagers' doorsteps with no previous reference. Men, women, and children answered my questions patiently. Several families offered me food and water, without which going to the next village was nearly impossible. I extend a deep sense of gratitude to all of them. More so, it is for these villagers and their ancestors, we have a wonderful species of the Greater One-horned Rhino living in their backyards, when rest of the world bid it goodbye.

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Abstract

The Kaziranga National Park (KNP) is considered a remarkable success in wildlife conservation history. In the last one hundred years, the Greater One-horned Rhinoceros (*Rhinoceros unicornis*) population revived from its near-extinction. The success is often credited to the bureaucratic and technocratic efforts to create wildlife habitats free of human intrusion.

This work tries to offer an environmental and agrarian explanation for the KNP's present. It situates the KNP in the agrarian and ecological context of the floodplains. The floodplain grassland is the rhino's prime habitat. However, in the early twentieth century, the fluid floodplains standing at the periphery of the Brahmaputra Valley's agrarian core were the sites of grazing, fishing, hunting, and forest produce collection. The park officials and conservationists over the twentieth century worked to free it from these connections. However, floodplains' role as the absorber of the agrarian core's disturbances like large livestock herd and wildlife meant that livestock grazing had a long presence around the park. The colonial government accommodated limited grazing in the sanctuary. Such reconciliatory measure was crucial in enlisting peasants' and graziers' support to revive the rhino population during the 1920s to 1950s. Ecological changes, bureaucratic convenience, and electoral politics kept these activities alive in the park until the 1960s. Renegotiating the linkages in the wider agrarian milieu was a slow process, and made the first steps when the imagination about the rhino entered Assam's cultural politics. KNP's example suggests that though 1970s is considered to be the decade of ecological restoration in India, the previous two decades after independence were not conversationally empty.

Culturally informed science and law united with regional cultural politics in cutting off the park from its agrarian connections. The process resulted into a shift from a continuum to sharp edge at the park's boundary. It is perhaps this success that science and law dominate the contemporary wildlife conservation debates. This work resituates the protected areas like the KNP in their agrarian milieu to explain their making. The agrarian history illuminates several conflicts and conservation challenges that impinge the park today.

Note on names and translations

Names of the places and communities correspond to the usage in the particular period. For instance, I use Nowgong for the colonial period and Nagaon in post-independent. Karbi Anglong replaces the Mikir Hills for the most recent period. Similarly, the old names of the communities like Miri remains in quoting the original sources but is changed to Mishing otherwise.

In most cases, the identity of interview respondents has been either hidden or given a pseudonym. This is done keeping in mind the very contested and polarised nature of views about conservation, communities, and issues.

The headlines of the newspaper articles, books and articles have been translated into English in most cases. All translations are mine, except when indicated.

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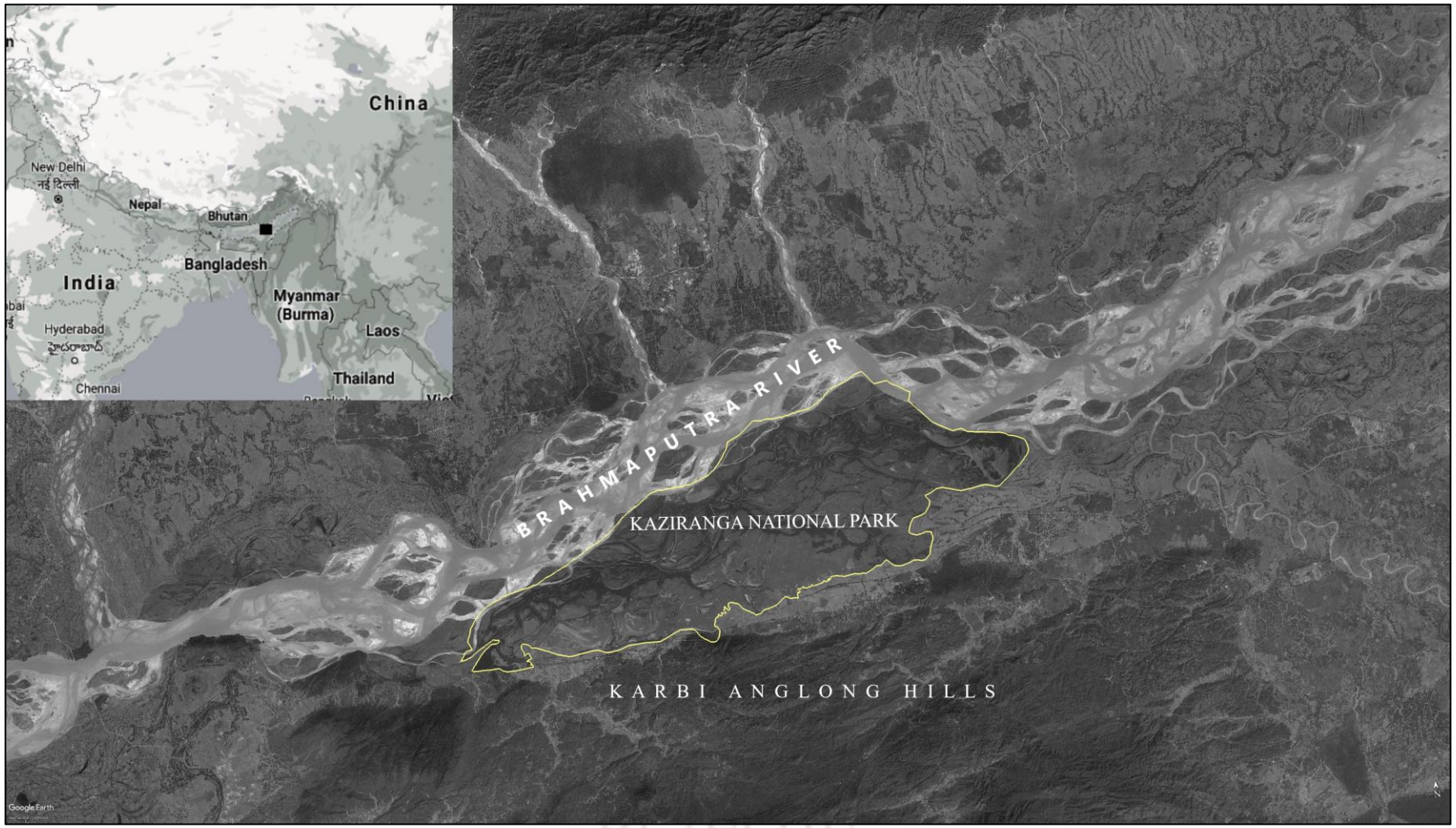

Figure 0.1: A Google Earth view of the Kaziranga National Park. Boundaries for representation only. Source: Taken from the Google Earth, August 2021.

Introduction

The Kaziranga National Park (KNP)[1] is 430 square kilometre (sq. km) of floodplain grassland along the Brahmaputra River's left bank.[2] It is bounded by the Karbi Hills in the south and Burapahar Hills in the west. In its east lies a narrow low-lying valley near the mouth of the Dhansiri River falling into the Brahmaputra. The KNP was first established as a Game Reserve in 1908 under the Forest Department of Assam (FD) to preserve the Greater One-horned Rhinoceros (*Rhinoceros unicornis*)[3]. Today, KNP is a home to the two-thirds of the world's 3,500 rhinos. It boasts as a home to the 'big five'—rhino, water buffalo (*Bubalus bubalis*), swamp deer (*Rucervus duvaucelii*), tiger (*Panthera tigris tigris*), and elephant (*Elephas maximus*)—a rare combination[4] in Protected Areas (PA)[5]. In 1974, it was declared the Kaziranga National Park and in 1985 a UNESCO World Heritage Site. In 2008-09, the KNP was also declared as a Tiger Reserve and now it is among the few Reserves that harbour over 100 tigers in India. It is also a part of the Karbi Anglong-Kaziranga-Itanki Elephant Reserve. However, it is the rhino that has put the KNP on the world map. It was the symbol and gave substance to the park as home to a globally endangered mega-fauna.[6]

Such a stellar personality of the park and the rhino also matches its public presence. The animal is a constant presence on the graffiti and statues all over Assam (Fig 0.1).

[1] Henceforth, I will refer to the park as the KNP. For specific periods, it will be referred to as the Kaziranga Game Reserve (1908-1916), Kaziranga Game Sanctuary (1916-1950), and Kaziranga Wildlife Sanctuary (1950-1969).

[2] The area excludes its buffers. Including the buffers it becomes 858 sq. km.

[3] Henceforth, I refer to the Greater One-horned Rhinoceros as the rhino.

[4] Manas National Park in Western Assam is the only other site where this combination is found.

[5] The International Union for Conservation of Nature (IUCN) defines a Protected Area (PA) as "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values." https://www.iucn.org/theme/protected-areas/about.

[6] Fauna consisting of individuals large enough to be visible to the naked eye. In this study, I restrict the use of mega-fauna to undomesticated species of tiger, rhinoceros, leopard, elephant, wild buffalo, and deer.

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Assam's school textbooks' cover pages read, "the one-horned rhino is Assam's resource; its killer is Assam's enemy" (Fig 0.2). The rhino is the mascot of Assam State Transport Corporation (ASTC), Assam Tourism, and South Asian Games held in Guwahati in 2016, besides several other privately owned entities. To catch a glimpse of the rhino, one does not necessarily need to enter the park or the Assam State Zoo, Guwahati. The National Highway (NH) 715 (earlier NH 37 and Assam Trunk Road), the main artery of communication in the Brahmaputra's south bank, passes south of the KNP. Driving on NH 715, one can see several pre-historic looking rhinos on the swamps at the KNP's edge. During the floods, wild animals flee the flooded KNP to the Karbi Anglong hills on the south. To avoid road-kills, commuters on the highway face strict traffic regulation for nearly 50 kilometres in the south of the park.

The KNP and the rhino have a special place in the imagination of the Assamese people.[7] To be sure, the KNP is at the centre of environmentalism in Assam. The regional and national press widely cover the instances of illegal rhino killing for its horn and the plight of the wildlife during the floods. The Assam Legislative Assembly and Indian parliaments discuss threats to the KNP's rhino more than any other species. In the past two decades, the Indian higher judiciary dived into finding solutions to protect the rhino and the KNP.[8] In the twenty-first century, rhino protection has become an index of a government's performance. Rhino killings in the KNP were among the key issues in the 2014 Indian parliamentary

[7] By Assamese, I refer to the Assamese-speaking people. For a detailed treatment of who is an Assamese, see Chandan Kumar Sharma, *Axomiya Kon?: Ek Rajanaitik Samajtattvik Avolokan* [Who is an Assamese: A Political Sociological Analysis] (Guwahati: Span Publications & Strategic Research and Analysis Organization, 2006). To refer to other linguistic and tribal groups, I refer to their specific group names such as Mishing, Adivasi, Karbi, Bengali, and Nepali.

[8] *Sunil Das & 7 Others vs. The State of Assam and 10 others.* (Gauhati High Court, October 9, 2015); *Rohit Choudhary vs. Union Of India & Ors* (National Green Tribunal, 7 September, 2012).

Figure 0.2: A rhino engraved on the walls in Guwahati, 2021.
Courtesy: Narayan Sharma.

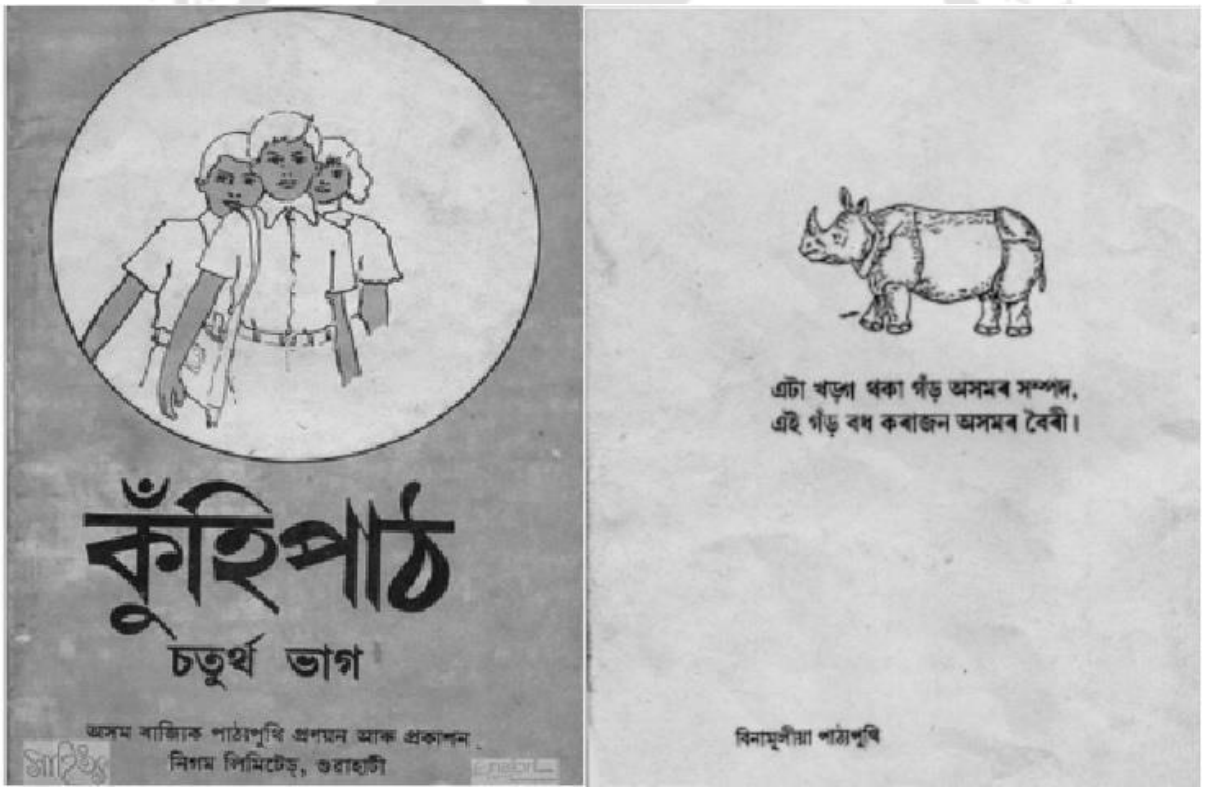

Figure 0.3: Primary school textbook's back cover with a rhino. Source: Nabakanta Barua, ed. *Kuhipath: Part IV* (Guwahati: Assam Textbook Production and Publication Corporation, 1997), back cover. Screenshot from https://vdocuments.site/reader/full/kuhipath-4th-edition.

elections and 2016 Assam state legislative assembly elections.[9] Meanwhile, we turn to the scholarship on wildlife conservation and national parks.

Wildlife Conservation and the National Parks

There are multiple positions about how best to protect wildlife. Most wildlife biologists and several international environmental agencies advocate for a state-led 'inviolate' habitat or wilderness.[10] Such a position has a legal sanctity as per the Wildlife (Protection) Act 1972 (WLPA). Critiques find such exclusionary spirit rooted in cultural biases instead of science.[11] They argue for coexistence of humans and wildlife. Some biologists, though sympathetic to the co-existence argument, find it overrated, generalized, and in ignorance of biological complexities.[12] They suggest that PA to PA conditions should determine critical issues like wildlife management and human relocation. Despites such critique, the charm of 'fortress conservation' continues in the Indian PAs.[13] Recently, militarisation and violation of human rights to protect wildlife in the KNP have come under severe criticism.[14] Despite these criticisms, KNP's core area nearly symbolises an 'inviolate' wildlife habitat.[15] KNP's

[9] "In Assam, Kaziranga's rhinos become election plank", *The Indian Express*, 6 April 2014 (E-paper); "Rhino protection a poll issue in Assam but only symbolically", *Hindustan Times*, 7 April 2016 (E-paper).

[10] K. Ullas Karanth, "A tiger in your bank," *Down To Earth*, (15 June 2008); K. Ullas Karanth, "Reconciling Conservation with Emancipatory Politics," *Economic and Economic Weekly*, 2005: 4803-4805; Valmik Thapar, *Battling for Survival: India's Wilderness over Two Centuries* (New Delhi: Oxford University Press, 2003). The author describes his work as "…battles to save India's wilderness … by autocratic means or authoritarian means or exclusionary principles" and written to "inspire forest officers to fight for our wilderness…".

[11] Vasant Saberwal, Mahesh Rangarajan, and Ashish Kothari. *People, Parks and Wildlife: Towards Coexistence* (New Delhi: Orient Longman, 2000), 14.

[12] Ghazala Shahabuddin, *Conservation at the Crossroads: Science, Society, and the Future of India's Wildlife* (Ranikhet: Permanent Black in partnership with New India Foundation, 2010), xvii.

[13] Dan Brockington, *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania* (London: The International African Institute and Others, 2002).

[14] Justin Rowlatt, "Kaziranga: The park that shoots people to protect rhinos," *BBC News* (10 February 2017).

[15] I use the term 'inviolate' to represent the normative standard and not the reality. Tourism, occasional cattle trespassing, and illegal rhino killing still continue inside the park. Besides, the park is yet to acquire several proposed expansions.

successful conservation story is often equated with the coming of a pristine home for the rhino.

Many works extol KNP's conservation success story.[16] These works focus on the natural history and bureaucratic and militarised efforts to protect the park from illegal hunters. To be sure, the threat of illegal hunting was real and gruesome in various spells over the last hundred years. However, these accounts hardly go beyond attributing rhino killing to the lure of easy money, and rarely focus on the deeper complexities involved in it.[17] Social scientists' attention to the KNP does not match the latter's visibility and importance in Assam's body politic, either. A small volume of work outlines the ecological, socio-political, and legal dimensions of the conservation history and politics in the KNP. Contemporary research highlights landlessness and resource pressure on the park, and people's attitude towards conservation.[18] Joëlle Smadja shows how some of these issues found expression in

[16] E. P. Gee, *The Wildlife of India* (New York: E. P. Dutton & Company, 1964), see two chapters on the rhino; P. Barua and B. N. Das, *Kaziranga: The Rhino Land in Assam* (Guwahati: Assam Forest Department, 1969); Arup Kumar Dutta, *Unicornis: The Great Indian One-Horned Rhinoceros* (New Delhi: Konark Publishers, 1991); C. P. Oberoi and B. S. Bonal, *Kaziranga: The Rhino Land* (Delhi: B. R. Publishing Corporation, 2002); Ranjit Barthakur and Bittu Sahgal, *The Kaziranga Inheritance* (Mumbai: Sanctuary Asia, 2005); Nitin A. Gokhale and Samudra Gupta Kashyap, *Kaziranga: The Rhino Century* (Guwahati: Kaziranga Centenary Celebration Committee, 2005); Dharanidhar Boro, *Kazirangat 24 Bochhor* [24 Years in Kaziranga] (Guwahati: Students' Stores, 2016); Bolin Deori, *Hunting the Hunters: Gorhor Chorang Sikar Pratirodhor Bastob Biboroni* [Real Description of the Anti-rhino Poaching Efforts] (Guwahati: J. S. Publications, 2020).

[17] Some efforts to attribute continued rhino killing in the contemporary times to rural poverty are made in Deori, *Hunting the Hunters*. However, it posits the local involvement of peasants as a handiwork of an international network of rhino horn trade.

[18] For a 2000-2001 socio-economic survey of 537 households around the park, see two articles: Rahul J. Shrivastava and Joel Heinen, "A Microsite Analysis of Resource Use Around Kaziranga National Park, India: Implications for Conservation and Development Planning," *The Journal of Environment & Development*, 2007; Rahul J. Shrivastava and Joel Heinen, "An Analysis of Conservation Attitudes and Awareness Around Kaziranga National Park, Assam, India: Implications for Conservation and Development," *Population Environment*, 2009; for landlessness among the Mishing due to land erosion and movement for land titles see Émilie Crémin, "Between Land Erosion and Land Eviction: Emerging Social Movements in the Mishing Fringe Villages of the Kaziranga National Park (Assam, North East India)," *Environment and Development: Emerging Issues and Debates*, 2011.

legal contestations in the early twenty-first century.[19] Another set of analysis of environmental law implementation and militarisation in the park shows that the neighbouring tribes and minorities were at the receiving end.[20] Departing from the technocratic explanations to the success of the KNP, Arupjyoti Saikia outlines Assam's political and social history in its making.[21] He attributes KNP's making to the key shifts in the conservation paradigms, rural contestations, and middle-class environmentalism. However, KNP's environmental history also must concern with the ebbs and flows over hundred years of its making. What do these cycles mean and how does one recover these? These cycles are manifest in the threats and promises, assault and defence, and advances and impasses the KNP witnessed since its establishment as Game Reserve.

Ecologists sensitive to the human dimension caution that wilderness and PAs are no panacea.[22] Wild animals and natural processes defy man-made boundaries. Research shows how "constantly, and closely", leopards "live in proximity to humans".[23] Similarly, elephants routinely defy PAs to cohabit a landscape with human beings. This cohabitation is filled with several cultural ambivalences and complexities which exceed the simplistic understanding of human-animal conflicts.[24] Scholarship on Great Himalayan National Park (GHNP)[25],

[19] Joëlle Smadja, "A Chronicle of Law Implementation in Environmental Conflicts: The Case of Kaziranga National Park in Assam (North-East India)," *South Asia Multidisciplinary Academic Journal* (Association pour la recherche sur l'Asie du Sud (ARAS)) 17 (2018).

[20] Sanjay Barbora, "Riding the Rhino: Conservation, Conflicts, and Militarization of Kaziranga National Park in Assam," *Antipode*, 2017: 1-19; Eleonora Fanari and Claudia Jana Sinibaldi Bento, "En el nombre del rinoceronte unicornio índico," *Ecología Política* 55 (2018): 77-81.

[21] Arupjyoti Saikia, "The Kaziranga National Park: Dynamics of Social and Political History," *Conservation and Society* 7, no. 2 (2009);

[22] See essays in Mahesh Rangarajan, M. D. Madhusudan, and Ghazala Shahabuddin, *Nature Without Borders* (Hyderabad: Orient Blackswan, 2017, First Published in 2014).

[23] Morten Odden, Vidya Athreya, Sandeep Rattan, and John D. C. Linnell, "Adaptable Neighbours: Movement Patterns of GPS-Collared Leopards in Human Dominated Landscapes in India," *PLoS ONE* 9, no. 11 (2014): e112044: 6.

[24] Maan Barua, "Bio-geo-graphy: landscape, dwelling, and the political ecology of human–elephant relations," *Environment and Planning*, 2014: 916, 928.

Keoladeo National Park,[26] Gir Forest National Park,[27] and Kuno Wildlife Sanctuary[28] suggests that despite the efforts to separate humans from nature and domestic from the wild, the boundaries remain blurred. Domestic livestock was so integral to the Gir Forest and Keoladeo that they nearly formed the natural working of the ecosystem.[29] The current conservation paradigm overlooks such evidence and invests considerably in disengaging the PAs from all kinds of human interferences.

The human-animal relationship is an established field of enquiry among the historians and anthropologists of India. Several works illustrate the position of a wide range of wild and domestic animals in the polity, ecology, warfare, hunting, art, and everyday human life.[30] Another strong body of work examines the relationship between hunting and the British

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[25] Ashwini Chhatre and Vasant K. Saberwal, *Democratizing Nature: Politics, Conservation and Development in India* (New Delhi: Oxford University Press, 2006).

[26] Beth Middleton, "Ecology and Objective Based Management: Case Study of the Keoladeo National Park, Bharatpur, Rajasthan," in *Battles Over Nature*, ed. Vasant K. Saberwal and Mahesh Rangarajan (Delhi: Permanent Black, 2003), 86-116.

[27] Mahesh Rangarajan, *Nature and Nation: Essays on Environmental History* (Ranikhet: Permanent Black/ Ashoka University Press, 2015), 86-142.

[28] Asmita Kabra, "Displacement from Wildlife Protected Areas and its Impact on Poverty and Livelihood Security: A Study of Kuno Wildlife Sanctuary, Madhya Pradesh," (PhD diss., Jawaharlal Nehru University, New Delhi, 2007).

[29] In the early 1970s, domestic livestock formed three-fourths of lions' prey in the Gir Forest. Paul Joslin, "The Environmental Limitations and Future of the Asiatic Lion," in *The Lions of India*, ed. Divyabhanusinh (Ranikhet: Permanent Black, 2008, First Published in *JBNHS* 81, 1984), 648-64; in Keoladeo National Park, domestic buffalos ate the water weeds to keep the wetland fit for birds, see Middleton, "Ecology and Objective Based Management."

[30] Mahesh Rangarajan, *India's Wildlife History: An Introduction* (Ranthambore Foundation, 2001); Divyabhanusinh, *The Story of Asia's Lions* (Mumbai: Marg Publications, 2005); Annu Jalais, *Forest of Tigers: People, Politics and Environment in the Sundarbans* (New Delhi: Routledge India, 2011); Mahesh Rangarajan, "Animals With Rich Histories: The Case of the Lions of Gir Forest, Gujarat, India," *History and Theory* 52, no. 4 (2013); Thomas R. Trautmann, *Elephants and Kings: An Environmental History* (Ranikhet: Permanent Black and Ashoka University, 2015); Divyabhanusinh, *End of a Trail: The Cheetah in India* (New Delhi: Oxford University Press, 2002, First Published in 1995); Divyabhanusinh, Asok Kumar Das, and Shibani Bose, *The Story of India's Unicorns* (Mumbai: The Marg Foundation, 2018); Radhika Govindrajan, *Animal Intimacies: Interspecies Relatedness in India's Central Himalayas* (Chicago: University of Chicago Press, 2018); Shibani Bose, *Mega Mammals in Ancient India: Rhinos, Tigers, and Elephants* (New Delhi: Oxford University Press, 2020).

Empire.[31] For the imperial officials, hunting was an exploit to demonstrate their chivalric and just image.[32] Europeans' hunting and taxonomic classification in the Asian and African colonies and display in the museums in England symbolised their control over the colonial natural environment.[33] The colonial government's vermin extermination programme mirrored the decimation of human outlaws and bandits.[34] In many ways, colonial attitude towards the wildlife reflected the nineteenth-century thinking about human's place in nature. In modern England, humans ascended to the most dominating place in the natural world.[35] The nineteenth-century socialist thought in England aimed a complete separation of man from the animal kingdom and advocated replacing man's exploitation of man with the exploitation of nature by man.[36] Recent scholarship exceeds a symbolic role of colonial hunting and provides more nuanced understanding to it. Vijaya Mandala argues that colonial hunting was not just of recreational or symbolic value. It was a method of colonial rule deeply embedded in the everyday official administration.[37] It was a way to extend the colonial rule in unpeopled margins by settling down the mobile groups and relieving them from the trouble of wild animals.[38] Besides the colonial officers, the rulers of the Indian princely states were another group of key players in elite hunting. The latter did not view hunting merely as a recreational avenue either. Circumscribed by the colonial power, many Indian princes used their hunting exploits to assert control over their state environments, occasionally defy British dominance,

[31] John M. MacKenzie, *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press, 2008, First Published in 1988); Rangarajan, *Nature and Nation*, 46-85; Rangarajan, *India's Wildlife History*; Vijaya Mandala, *Shooting a Tiger: Big-Game Hunting and Conservation in Colonial India* (New Delhi: Oxford University Press, 2018).

[32] Rangarajan, *Nature and Nation*, 46.

[33] Mackenzie, *The Empire of Nature*, 36.

[34] Rangarajan, *Nature and Nation*, 53.

[35] Keith Thomas, *Man and the Natural World: Changing Attitudes in England (1500-1800)* (London: Penguin Books, 1984).

[36] Thomas, *Man and the Natural World*, 50.

[37] Mandala, *Shooting a Tiger*, 2, 39.

[38] Mandala, *Shooting a Tiger*, 53, 61.

and negotiate favour with the colonial elites.[39] Brahmaputra's floodplains—dotted with homes to the extinct rhinos—promises regionally grounded and empirically rich review of colonial control over nature, disciplining mobile groups, and state-making.

There was a remarkable shift from the nineteenth-century lure for hunting to preservation in the twentieth. Two anthologies on Indian wildlife illustrate this shift.[40] However, sources of such shift were as varying as the geography, polity, and species. Many present-day PAs in Rajasthan can be attributed to the princely states' efforts to preserve games.[41] Hunting and conservation were the two facets of the same paradigm.[42] Jim Corbett and R. W. Burton, both hunter-turned-conservationists, exemplified this. Corbett's tiger hunting reflected his deep appreciation for the animal (conservation) as well as benevolence towards the villagers he sought to protect (hunting). Such protective hunting aside, the sportsmen and hunters with modern weapons did not always have an easy go in the Indian countryside. Indian villagers increasingly resisted their sporting pursuits. Motivation to such native resistance followed from religious beliefs coupled with the anti-colonial consciousness and assertion of local control.[43] In central India, many tribals and Hindus did not share the colonial campaign of extermination of the wild dog.[44] Such resistance occasionally contributed to the protection of the wild dog and blackbuck. In 1903, concerned over the declining game in the Asian and African colonies, the erstwhile English hunters formed the

[39] Julie E. Hughes, *Animal Kingdoms: Hunting, the Environment, and Power in the Indian Princely States* (Cambridge, Massachusetts: Harvard University Press, 2013).

[40] Mahesh Rangarajan, ed. *The Oxford Anthology of Indian Wildlife. Volume I: Hunting and Shooting* (New Delhi: Oxford University Press, 1999); Mahesh Rangarajan, ed. *The Oxford Anthology of Indian Wildlife. Volume II: Watching and Conserving* (New Delhi: Oxford University Press, 1999).

[41] Hughes, *Animal Kingdoms*, 272.

[42] Mandala, *Shooting a Tiger*, chapter 6.

[43] Ezra Rashkow, "Resistance to Hunting in Pre-independence India: Religious environmentalism, ecological nationalism or cultural conservation?" *Modern Asian Studies* 49, 2 (2014).

[44] Mahesh Rangarajan, *Fencing the Forests: Conservation and Ecological Change in India's Central Provinces 1860-1914* (New Delhi: Oxford University Press, 1996), 174-176.

Society for Preservation of Fauna in the Empire (SPFE).[45] Though the SPFE with its headquarters in London did not focus in Asia until the 1920s,[46] it created a buzz on fauna protection in the empire. The nineteenth-century protection measures through legislation on particular species[47] gave way to the Game Reserves and sanctuaries in the twentieth. The Kaziranga Game Reserve was one of many such examples in India.

Game Reserves had precedence in other British colonies like Cape Colony in 1856, Australia in 1879, Canada in 1885, Kenya in 1897, and Zululand in 1897.[48] However, Assam's three Game Reserves (Kaziranga included) created in 1908 had significantly different visions.[49] First, these aimed to protect a particular species, i.e. rhino. Secondly, the colonial government saw these Game Reserves off-limits to human activities like hunting, fishing, cultivation, grazing, and foraging. The establishment of the Game Reserve in Kaziranga followed only after demarcating an uninhabited land and prohibiting all other forms of human activities. Such was not the case even in some of the most famous national parks today. For example, the proclamation of the Sabi Game Reserve in 1902 (nucleus of today's Kruger National Park in South Africa) notified that all the African residents should go. However, despite early enthusiasm to evict the native Africans, the game warden found it difficult to patrol the reserve without their help.[50] In Kaziranga Game Reserve, while the peasants, hunters, fishers, and pastoralists challenged the vision of human intervention-free

[45] Ramachadnra Guha, *Environmentalism: A Global History* (Gurgaon: Penguin Books, 2016, First Published in 1995), 62-66.

[46] Mackenzie, *The Empire of Nature*, 286.

[47] Elephant was declared as a protected species through the Elephant Preservation Act 1879.

[48] Jane Carruthers, *The Kruger National Park: A Social and Political History* (Scottsville: University of Natal Press, 1995), 32.

[49] "Proposed reservation of the Laokhowa, North Kamrup and Kaziranga forests in Nowong, Kamrup and Sibsagar, respectively." September 1905, Revenue–A, Assam Secretariat Proceedings (ASP).

[50] Carruthers, *The Kruger National Park*, 43.

approach to preservation, the idea revived at critical junctures of its career. This thesis concerns when and why these ideas got revived.

The idea of untouched nature as a measure of its protection has specific origin in the modern world. Most notably, the quest of sublime nature was inscribed in the American national parks in the nineteenth century. Calls to protect nature from reckless destruction led to the formation of Yellowstone National Park in 1872 in the United States of America (USA). Analysing the celebrated model of the American national parks, historian Mark David Spence shows that prerequisite for preservation was the creation of uninhabited wilderness.[51] In creating an 'unpeopled' landscape of scenic importance, native Indians' millennia of material, cultural, and spiritual association with the land was conveniently ignored.[52] Yellowstone inspired the creation of national parks worldwide. However, scholars caution us from missing a range of other motivations behind the national parks. In Canada, national parks aimed to boost economic growth through tourism and in Australia, they provided recreational avenues near cities. In New Zealand, it was the Maori people's gift to the nation.[53] Despite a range of motivations behind their establishments, the quest for sublime nature—canyons, rocks, meadows, and scenic beauty—protected from reckless destruction, is a common thread that binds them.

In contrast, most national parks in the erstwhile African and Asian colonies originated as 'Game Reserves' to preserve the rapidly declining wild animals.[54] If Yellowstone was a

[51] Mark David Spence, *Dispossessing the Wilderness: Indian Removal and Making of the National Parks* (New York: Oxford University Press, 1999), 4.

[52] For the native Indians' association with Yellowstone National Park, see Spence, *Dispossessing the Wilderness*, 43-44.

[53] Melissa Harper and Richard White, "How National Were the First National Parks? Comparative Perspectives from the British Settler Societies," In *Civilizing Nature: National Parks in Global Historical Perspective*, edited by Bernhard Gissibl, Sabine Höhler and Patrick Kupper (New York, Oxford: Berghahn Books), 2012.

[54] For example, Sabi Game Reserve (now Kruger National Park, South Africa), Kaziranga Game Reserve, and Serengeti Game Reserve (now Serengeti National Park, Tanzania).

moment of American national unity in the post-civil war era, Game Reserves waited for their national moments before converting into national parks. For instance, in 1926, the South African government declared the Sabi Game Reserve (established in 1898) as Kruger National Park. The park embodied the Afrikaner nationalism and marked the union of the two clashing white groups—the Afrikaans (Dutch decedents) and the British. The 'national' in the park was synonymous with the 'white', where the native Africans had no place.[55] Today, there are over 100 national parks in India. However, there is a limited exploration around them to tease out the broader currents in society and polity.[56] For example, what changed in India's polity and culture to create at least 50 national parks during 1974–1984? What is 'national' about the Indian parks? Also, how did the 'national' correspond to a vision of a human intervention-free zone in Indian parks?

The making of national parks worldwide through regulations and militarisation did not go uncontested. A growing body of scholarship analyses such contestations to explain the outcome of conservation practices.[57] In the East African British colonies like Tanzania and Kenya, the national parks and Game Reserves were at the centre of the anti-colonial movements based on the struggle over land.[58] The Anglo-American conception of nature—where the humans had no place—denied the American Indians' spiritual, historical and cultural associations with the landscape.[59] These competing conceptions of the landscape manifest in the prolong resistance towards the national parks in the USA and Africa. Karl Jacoby tried to "recreate the moral universe that shaped local transgressions of conservation

[55] Carruthers, *Kruger National Park*, 60-64.

[56] For some exceptions, see Rangarajan, "Animals With Rich Histories"; Saikia, "The Kaziranga National Park"; Jalais, *Forest of Tigers*; Chhatre and Saberwal, *Democratizing Nature*.

[57] Karl Jacoby, *Crimes against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley: University of California Press, 2001); Roderick P. Neumann, *Imposing Wilderness Struggles over Livelihood and Nature Preservation in Africa* (Berkeley: University of California Press, 2002, First published in 1998); Chhatre and Saberwal, *Democratizing Nature*.

[58] Neumann, *Imposing Wilderness*, 76-77.

[59] Spence, *Dispossessing the Wilderness*, 43-44.

laws, enabling us to glimpse the pattern of beliefs, practices, and traditions that governed how ordinary rural folk interacted with the environment".[60] This line of enquiry attends to the historic departures through which rural folks found themselves in the new conditions of resource scarcity. Park managers and conservationists often mistake rural communities' defiance of conservation as borne out of ignorance. Roderick P. Neumann's study in Arusha National Park, Tanzania, shows that their defiance reflects anger against the dispossession from the customary rights in the park.[61] To sum up, in Jacoby's words, "law and its antithesis—lawlessness—are therefore the twin axes around which the history of conservation revolves."[62]

The works of Jacoby and Spence represent a significant shift in the American historiography of national parks. Previous works focussed on the cultural shifts in the American society towards wilderness.[63] The new scholarship has turned to the social cost of creating wilderness on the rural world. This shift takes a cue from the south Asian environmental historiography—largely centred on the colonial forestry—that foregrounds the social costs and subaltern voices.[64] While Jacoby and Spence give insightful accounts of non-elite's role in conservation outcomes, they assume that the Native Americans' resistance to the national park were rooted in the loss of 'traditional' ways of production. In this framing, all contestations—illegal hunting, maiming, injuring, and theft—were remnants of an unchanging moral world of the rural folks. Such limitation in their otherwise fascinating works emerges from overlooking the location of the PA in the nation/province's agrarian

[60] Jacoby, *Crimes against Nature*, 3.

[61] Neumann, *Imposing Wilderness*, 175-176.

[62] Jacoby, *Crimes against Nature*, 2.

[63] Two influential works were Roderick F. Nash, *Wilderness and the American Mind* (New Haven and London: Yale University Press, 2014, First Published in 1967); Alfred Runte, *National Parks: The American Experience* (Lanham: Taylor Trade Publishing, 2010, First Published in 1979).

[64] Paul Sutter, "What can the U.S. Environmental Historians Learn from the Non-U.S. Environmental Historiogrpahy?" *Environmental History* 8, no. 1 (2003): 112.

landscape. The changes in the ecology, economy, and politics develop new material conditions in which peasants and other forest dwellers often mutated their production activities.[65] This calls for an attention to the new meanings attributed by these groups on the PAs. Neumann overcomes this limitation—outlined above in case of the American national parks—by situating Tanzania's Arusha National Park in dynamic agrarian and ecological conditions. However, Neumann's work shows very little of what he set out to do: "…natural processes continue to operate [in the national parks], sometimes in ways that challenge or contradict the preservationist aims of some human interventions."[66] This thesis foregrounds the rural peoples' association with the rhino and other wild animals, their livelihood patterns, and natural processes in shaping the KNP. First, it shows how the rural people—who found themselves in a rapidly changing agrarian condition—contested and cooperated with conservation efforts. The thesis shows that local peoples' empathy towards the rhino was crucial in its survival in the lowlands of Kaziranga when it perished to the Europeans' guns elsewhere. To be sure, there were episodes when the rhino came under attack for its horn. However, its remarkable recovery of population even before the phase of militarised protection in the 1960s suggests that a general empathy towards the rhino towered over a constant low key or heavy episodic assault on it. The thesis shows that in the Kaziranga environs,[67] sources of such empathy hinged on development that the rhino promised. Secondly, the thesis demonstrates how the natural processes like flood and erosion, aggradation and siltation, and wild animal ethology interacted with the conservation efforts. In fact, agrarian conditions in the Kaziranga environs were interwoven with the natural

[65] South Asian environmental historiography shows how tribes, pastoralists, and shifting cultivators turned to varying degrees of settled form of cultivation or alliances with settled cultivators on the wake of increasing area locked up by the imperial forestry. For the Central Indian situation, see Rangarajan, *Fencing the Forests*; for Western Himalaya, see Saberwal, *Pastoral Politics*.

[66] Neumann, *Imposing Wilderness*, 28.

[67] I use the term Kaziranga environs to refer to the park (previously Game Reserve and wildlife sanctuary) and its neighbourhood together. The neighbourhood has villages in the east, south, and west, and the Brahmaputra River, and the floodplain in its north. It is neither a territorial nor conceptual term.

processes. Thus this work examines the outcomes of conservation efforts in the KNP at the backdrop of dynamic agrarian and ecological conditions. This approach is particularly important in geographies like South Asia where PAs are small islands in the vast swath of the agrarian landscape.

Situating National Parks in the Agrarian Environs

It is useful to remember that the KNP originated as a Game Reserve under the FD and still functions under it. From the 1980s, some pioneering contributions were made to the South Asian environmental history of the forests. First set of works by Ramachandra Guha and Madhav Gadgil highlighted how colonial rule marked a 'watershed' in India's ecological history.[68] They argued that British colonialists usurped vast forests to fulfil the imperial and commercial needs displacing the earlier forms of resource use. Richard Grove challenged this argument by outlining the colonial forestry's intellectual roots in genuine scientific concerns of depleting forests and environmental degradation.[69] However, in establishing a niche for environmental history, historians moved away from a rich tradition of writing agrarian history of South Asia. Much of the agrarian history until then was preoccupied with the fertile alluvial tract that produced surplus on which various polities thrived.[70] But it rarely went

[68] Ramachandra Guha, *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya* (Ranikhet: Permanent Black & Ashoka University, 2010, First Published in 1989); Ramachandra Guha, "An early environmental debate: The making of the 1878 forest act," *The Indian Economic & Social History Review* 27 (1990): 65-84; Madhav Gadgil and Ramachandra Guha, *This Fissured Land: An Ecological History of India* (New Delhi: Oxford University Press, 2013, First Published in 1992).

[69] Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge: Cambridge University Press, 1995).

[70] Eric Stokes, *The English Utilitarians and India* (New Delhi: Oxford University Press, 1992, First Published in 1959); Ranajit Guha, *A Rule of Property for Bengal: An Essay on the Idea of Permanent Settlement* (New Delhi: Orient Longman, 1982, First Published in 1963); Burton Stein, *Thomas Munro: The Origins of the Colonial State and His Vision of Empire* (New Delhi: Oxford University Press, 1991); David Ludden, *The New Cambridge History of India IV.4: An Agrarian History of South Asia* (Cambridge: Cambridge University Press, 1999); for a critical analysis of the agrarian and environmental historiography, see Neeladri Bhattacharya, *The Great Agrarian Conquest* (Ranikhet: Permanent Black, 2018), Introduction.

beyond the arable land to consider the pastures and forests.[71] Agrarian historians considered the forests and pastures as uncultivated wastes waiting to be brought under the touch of the plough.[72] To sum up, while agrarian historians focused on the settled peasantry and arable land, early environmental historians were preoccupied with the forests and pastures.

From the late 1990s, environmental historians of South Asia increasingly analysed the interconnections between forest, pasture, agriculture, and commerce.[73] We will discuss two key strands useful for this study here. First, a common thread that binds this scholarship is that conservation had to contend with various issues related to property rights, customary rights, peasant protests, and interdepartmental differences. Secondly, besides locking a vast swathe of land from the peasants and forest dwellers, colonial forestry was central in regulating their production system and settlement pattern. Forestry enclosures forced the shifting cultivators and foraging groups to take up sedentary cultivation which was easily taxable. Rural folks also developed creative responses to such rapidly changing situations. Transhumant pastoralists and settled cultivators in the Western Himalayas formed alliances of mutual benefits.[74] If the environmental historians became more attentive to the forestry-

[71] In contrast, in the 1980s, sociologists pioneered in highlighting the continued vitality of the Common Property Resources (CPR) in the rural livelihood. See N. S. Jodha, "Common Property Resources and Rural Poor in Dry Regions of India," *Economic and Political Weekly* 21, no. 27 (1986): 1169-1181.

[72] This contrast between agrarian history and environmental history is emphatically made in Neeladri Bhattacharya, "Introduction," *Studies in History* 14, no. 2 (1998): 165-171.

[73] Chetan Singh, "Forests, Pastoralists and Agrarian Society in Mughal India," In *Nature, Culture and Imperialism*, by David Arnold and Ramachandra Guha, 21–48 (New Delhi: Oxford University Press, 1996). Rangarajan, *Fencing the Forests*; K. Sivaramakrishnan, *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India* (New Delhi: Oxford University Press, 1999); the volume of *Studies in History* 14, no. 2 (1998) was dedicated to this cause; Vasant K. Saberwal, *Pastoral Politics: Shepherds, Bureaucrats and Conservation in the Western Himalaya* (New Delhi: Oxford University Press, 1999); Chhatre and Saberwal, *Democratizing Nature*; Arupjyoti Saikia, *Forests and Ecological History of Assam, 1826-2000* (New Delhi: Oxford University Press, 2011); Arupjyoti Saikia, "Making Room Inside Forests: Grazing and Agrarian Conflicts in Colonial Assam," in *Shifting Ground: People, Animals, and Mobility in India's Environmental History*, ed. Mahesh Rangarajan and K. Sivaramakrishnan (New Delhi: Oxford University Press, 2014), 155-179; for an early conceptualisation to bring the agrarian and environment within a single unit of analysis, see the "Introduction" and essays in Arun Agrawal and K. Sivaramakrishnan, *Agrarian Environments: Resources, Representations, and Rule in India* (Durham: Duke University Press, 2000).

[74] Saberwal, *Pastoral Politics*.

induced changes in agrarian practices, recent agrarian history dwells on *how* a colonial agrarian order was achieved by bringing the forests and pastures—beyond the cultivated fields—under one unit of analysis. This development in the South Asian historiography is instructive to locate the advent and rise of a Game Reserve in the mutually constitutive 'agrarian' and 'environment' within which categories like forests, fields, and pastures mutated and overlapped.[75] It is equally important to locate the Game Reserve in the overarching organising principles of the colonial rural world.

The very organizing principle of the colonial 'agrarian'—almost universally equated with settled cultivation—has been critically reviewed. Neeladri Bhattacharya argues that the colonial rural order was achieved through an "internal conquest".[76] The conquest universalised the 'rural' by projecting the desired elements of the settled villages as the ideal to all other areas. Such mastery inevitably erased the legitimacy of all other 'un-owned' areas such as pastures, meadows, and deserts.[77] Often, erasures were made possible by refashioning the State's relationship with its subjects. Bodhisattva Kar shows that colonial officials in Assam refigured the pre-colonial figure of the *paik*[78] as the *ryot* (cultivator with titled land).[79] They characterised the *ryot* as sedentary, plough user, surplus producer, and taxpayer. The 'modern' *ryot* was in contrast to the 'primitive' slash-and-burn cultivator, nomadic tribe, and slave. In branding the dispersed forms of production and producer as primitive, the colonial rural world moved in a teleological march towards a settled peasantry.

[75] Agrawal and Sivaramakrishnan, *Agrarian Environments*, "Introduction".

[76] Bhattacharya, *The Great Agrarian Conquest*, 7-8.

[77] Bhattacharya, *The Great Agrarian Conquest*, chapter 2.

[78] A *paik* was an able-bodied man whose obligation to the Ahom State was to provide labour for 3-4 months a year. In return, he was entitled to revenue-free homestead and wet-rice land.

[79] Bodhisattva Kar, "The Birth of the Ryot: Rethinking the Agrarian in Assam," In *Landscape, Culture, and Belonging: Writing the History of Northeast India*, ed. Neeladri Bhattacharya and Joy L. K. Pachuau (New Delhi: Cambridge University Press, 2019), 38-65.

The settled cultivation that formed the agrarian core had to be free from all kinds of disturbances like the marauding wildlife, livestock herds, and floods. Colonial emphasis on an expanding agrarian core meant that the Game Reserves could be established only in the peripheries deemed 'uncultivable' in the foreseeable future.[80] However, scholarship on environmental history—despite the emphasis to bring agriculture, forestry, and pastoralism under a composite unit of analysis—is yet to break new grounds on the constant *remaking* of the peripheries like floodplains and its interplay with the agrarian core that comprised the settled villages, the mainstay of the colonial revenue.[81] The peripheries were not just quantitatively diminishing uncultivated lands making way for settled cultivation and forestry. Instead, as this thesis shows, colonial administration constantly remade these peripheries to create an undisturbed agrarian core. Here, we discuss two critical ways in which the agrarian core was bound with the peripheral areas like the floodplains in complex ways. First, the floodplains acted like a sink to absorb the irritants like the large livestock herds from the settled villages. In the 1900s, the colonial government was wary of livestock herds disturbing the rapidly expanding agriculture that risked the land revenue. In the Brahmaputra Valley, the expanding cultivation and Reserved Forests (RF)—both repulsive to the large livestock herds—forced the herders to relocate to the 'unoccupied' floodplains.[82] As the twentieth century progressed, pastoral economy increasingly concentrated in the floodplains, but continued to supply draft animals to agriculture and dairy products to growing urban

[80] From F. J. Monahan, Secretary to the Chief Commission of Assam to the Commissioner, Assam Valley Division (AVD), 15 March 1904, no. 79, September 1905, Revenue–A, ASP.

[81] A pioneering effort to analyse the *long durée* interplay between polity, river, floodplains, agriculture, and forestry is made in Arupjyoti Saikia, *The Unquiet River: A Biography of the Brahmaputra* (New Delhi: Oxford University Press, 2019). However, the colonial remaking of the floodplains in relation to the rural worlds' march towards settled peasantry in specific historical periods such as early twentieth century requires greater nuance.

[82] W. J. Arbuthnot, *Grazing in Assam* (Shillong: Assam Secretariat Printing Office (ASPO), 1916), 20.

settlements.[83] The floodplains were also haven for carnivores like tiger and crop marauding buffalos and elephants. Secondly, while taxability was central to the agrarian core, cultivation in the peripheral land was crucial for peasants to pay their land revenue. To pay revenue in cash, peasants grew cash crops like mustard, jute, and pulses in their *faringati* holdings—newly opened dry crop land held for 3–5 years.[84] Despite the Government of Assam's aversion to such temporary cultivation, they entertained it well into the twentieth century. Instead, to encourage cultivation, the government taxed the *faringati* lower than the settled cultivation.[85] Such temporary cultivation also moved towards the floodplains as the dry land available for *faringati* became scarcer by the close of the nineteenth century. To sum up, the peripheries like the floodplains served multiple roles—frontier of agrarian expansion, supplier of agricultural inputs like bullocks, a sink for the agrarian core's unwanted livestock herds and refuge for wildlife. These interactions played a crucial role in shaping wildlife's fate in the nineteenth-century Brahmaputra valley. Conversely, rhino preservation initiative in the early twentieth century came as a poser to the extant role the floodplains played towards maintaining an undisturbed and expanding agrarian core.

At the start of the twentieth century, in the Brahmaputra Valley, uncultivated land was concentrated largely in the floodplains and foothills. Even the foothills came under rapid inroads of the RFs and European planters.[86] The floodplains were the last remaining avenue

[83] A survey of the grazing economy in 1943-44 showed an overwhelming number of pastures in the floodplains. S. P. Desai, *Report of the Special Officer Appointed for the Examination of Professional Grazing Reserves in Assam Valley* (Shillong: Assam Government Press (AGP), 1944).

[84] Rajen Saikia, *Social and Economic History of Assam, 1853-1921* (Delhi: Manohar, 2000), 90-91, 97.

[85] In 1868-69, the *basti* (homestead), *rupit* (wet rice land), and *faringati* (temporary cultivation) were taxed at Re. 1, 10 annas, and 8 annas, respectively. There were further classifications in the subsequent resettlements, but *faringati* land was taxed at the lowest rates. S. G. Hart, *Report on the Land Revenue Settlement of the Sibsagar District During the Years 1902-03 to 1905-06* (Shillong: Eastern Bengal and Assam Secretariat Printing Office (EBASPO), 1906), Part I, Section VI; A. R. Edwards, *Report on the Land Revenue Settlement of the Nowgong District During the Years 1905-06 to 1908-09* (Shillong: EBASPO, 1909), Part I, Section VI.

[86] A map enclosed in the annual forest report shows that most RFs in the Brahmaputra valley were in the foothills encircling the valley. E. S. Carr, *Progress report of forest administration in the province of Assam for*

for temporary cultivation, livestock grazing, and hunting. As the twentieth century progressed, the rural world was marching towards the annually flooded and transient floodplains, hitherto with limited penetration.[87] This march also paralleled the retreat of wildlife from the agrarian core or the settled villages, and tea estates in the Brahmaputra Valley.[88] Momentum for wildlife preservation, especially the rhino gained at this backdrop of changes in the valley. Establishment of the Game Reserves in the 'uncultivable' floodplains (as perceived by the colonial officials) was first of its kind colonial intrusion in these peripheries within the province. Scholars have argued that intrusion of the State beyond the cultivated land was the fundamental departure of the colonial rule in South Asia from the previous regimes.[89] It brings us to the question here—were there limits to such intrusions? In other words, how far the imperial government succeeded in reordering the natural environment? The Kaziranga Game Reserve in the Brahmaputra's floodplains offers an interesting example.

Game Reserves were supposed to serve two objectives, wildlife preservation in the peripheral floodplains and maintaining an undisturbed agrarian core. That Game Reserves would protect the wildlife, is straightforward. However, the second objective requires some elaboration. The annually flooded grassland chosen for the Game Reserves were least appealing to cultivation and stood farthest from the agrarian core. It meant that wild animals posed little or no threat to settled cultivation. Therefore, standing at the Game Reserve's

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the year 1901-02 (Henceforth, *PRFA Year*) (Shillong: ASPO, 1902); in 1903, the government granted 500 acres to T. F. Severin in the Naga foothill areas of Sibsagar district to cultivate bowstring hemp, a new fibre. From Secretary to the Chief Commissioner to Commissioner, Assam Valley Division (AVD), 19 November 1903, Collection II, File no, 58, 1903, Assam Commissioner Office (ACO), Assam State Archives (ASA).

[87] Saikia, *The Unquiet River*, 256-258.

[88] Chapter 1 discusses this aspect in greater detail.

[89] Mahesh Rangarajan, "Environmental Histories of India: Of States, Landscapes and Ecologies," in *The Environment & World*, ed. Kenneth Pomeranz and Edmund Burke III (Berkeley: University of California Press, 2009), 235-37.

edge, every inch of land up to the settled core appeared reclaimable.[90] Summing up, Game Reserves would achieve two distinct and independent realms—agrarian and nature. However, the issue was with the colonial making of these peripheries that risked both the objectives. First, we examine how the objective of achieving a self-contained 'nature' came under risk.

The river and floodplains—by their ecological instability and obstinacy—resisted the colonial efforts to control the natural environment. The annually flooded floodplains did not fully lend to settled cultivation until the early twentieth century.[91] In the twentieth century, peasants took up even the flood-prone land for settled cultivation. As a result, temporary cultivation and grazing were pushed deeper and deeper into the floodplains. Current scholarship generally assumes that grazing in the Brahmaputra's floodplain grassland was an obvious ecological choice for the grazier.[92] It is to overlook that the mobile graziers seasonally moved between the floodplains in the dry season and foothills or plains in the monsoon.[93] In the twentieth century, their confinement to the floodplains was due to the removal from an expanding agrarian core, tea estates, and RFs, all immune to the flood.[94] If these changes took place over nearly half a century since the 1850s, beginning the 1910s, the Bengali Muslim peasants' massive reclamation of the Brahmaputra's floodplains for jute cultivation was sudden.[95] Jute frontier expansion made the riverine grassland a contested

[90] The law did not completely ban hunting outside the Game Reserves until the enactment of the Assam Rhino Preservation Act 1954.

[91] Saikia, *The Unquiet River*, 256-258.

[92] Ritupan Goswami, "Rivers and History: Brahmaputra Valley in the Last Two Centuries" (PhD diss., Jawaharlal Nehru University, New Delhi, 2010); Suryasikha Pathak, "Forests, Fields and pasture: Environmental and Revenue Debates of Land Usage in Colonial Assam in 1910-1920," in *Playing with Nature: History and Politics of Environment in North-East India*, ed. Sajal Nag (New Delhi: Routledge, 2016), 161-173; Saikia, "Making Room Inside Forests"; Saikia, *The Unquiet River*.

[93] Goswami, "Rivers and History," recognises the temporary nature of grazing in the floodplains (p. 151) and their continuous dispossession by tea gardens and RFs (p. 175). Still, he overlooks changing relationship between the two processes.

[94] Arbuthnot, *Grazing in Assam*, 20.

[95] Arupjyoti Saikia, "Jute in the Brahmaputra Valley: The Making of flood control in twentieth-century Assam," *Modern Asian Studies* 49, no. 5 (2015).

zone of cultivation and other agrarian activities. It meant that the newly formed Game Reserve in the Kaziranga's floodplains saw the growing concentration of the graziers, fishers, and temporary cultivators. Moreover, the braided course of the Brahmaputra[96] kept the reserve boundary fluctuating. Constantly changing river courses, grazing, forest produce collection, and fishing vexed the Game Reserve throughout the twentieth century.

Secondly, the Game Reserves also challenged the agrarian order in the valley. The Game Reserves in Assam occupied a much smaller area as compared to the RFs.[97] That 0.7 per cent such a small fraction of area with no future reclamation prospects could turn out to be a poser to the agrarian order appears baffling prima facie.[98] However, when we posit the creation and consolidation of the Game Reserve in the constant churn of the valley, it becomes evident that the resource contestations around the Game Reserve were indices of a much wider spatial and temporal matrix. Much of the dilemmas around the later expansion of the reserve by removing the graziers were tied with maintaining the larger agrarian order.[99] In such framing of the Kaziranga Game Reserve in the agrarian landscape, even the small proportion of land set aside for wildlife preservation can illuminate the historical changes in society, ecology, and polity. The following section introduces the broader ideas of how the politics, economy, and science interacted to determine the course of wildlife preservation in the locales like Kaziranga Game Reserve (and its subsequent avatars).

[96] For a discussion, see Saikia, *The Unquiet River*, 18-20.

[97] In 1912, RFs occupied 7,800 sq. km in the Brahmaputra Valley or its one-eighth. Saikia, *Forests and Ecological History of Assam*, 76; in contrast, the three Game Reserves (Kaziranga, Laokhowa and North Kamrup) covered only 550 sq. km, A. V. Monroe, *PRFA 1911-12* (Shillong: ASPO, 1912).

[98] Frictions between the FD, forest dwellers and peasants, were more widespread phenomena when the forestry operations interacted with a wider cross-section of population and geography. By the year 1900, nearly one-fifth of British India was under the control of the forest department, Rangarajan, *Fencing the Forests*, 203.

[99] "Addition of certain area to the Kaziranga Game Reserve in Sibsagar", nos. 181-209, September 1917, Revenue–A, ASP.

Nation, Science, and Nature

Wildlife preservation in colonial India hardly earned the importance it did in the US or southern Africa.[100] Colonial preservation initiatives were centred on protecting the sports hunting interests. As an exception, the government initiated elephant preservation measures to meet the colonial needs.[101] Only a thorough examination of specific examples like Kaziranga Game Reserve will explain the colonial predicament better. The tea planters lobbied hard before the Government of Assam to disallow the graziers, fishers, and other forests produce collectors inside the Game Reserve. Their persistence led to doubling the area of the reserve within a decade of its formation.[102] However, as the rationale for wildlife preservation began to exceed trophy hunting, planters slowly receded from the plot. In independent India, wildlife preservation received renewed vigour. India wanted to carve out a new place among the world's nations, distancing itself from war and violence that just ended.[103] Indian national leaders often appropriated symbols of nature in defining the newly independent nation. In 1950, India gifted a pair of elephant calves, 'Shanti' and 'Ashok' to a zoo in the USA.[104] The names were carefully chosen to mean peace and harmony.

Accounts examining the post-independence wildlife conservation efforts overlook the power struggle in the governance of nature. The Indian Constitution mandated the states to manage wildlife, whereas the Union government had only an advisory role. However, soon

[100] Rangarajan, "Environmental Histories of India: Of States, Landscapes and Ecologies", 231.

[101] Mandala, *Shooting a Tiger*, chapter 5.

[102] In 1913, the FD added 54.66 sq. km, notification no. 295R, 28 January 1913, Government of Assam; In 1917, the FD again added 151.87 sq. km, notification no. 3560R, 26 July 1913, Government of Assam; for planters' role, see "Extension of the Kaziranga Game Reserve in the Sibsagar district", nos. 37-47, May 1914, Revenue–A, ASP and "Addition of certain area to the Kaziranga Game Reserve in Sibsagar", nos. 181-209, September 1917, Revenue–A, ASP.

[103] Rangarajan, *Nature and Nation*, 199-200.

[104] "Indian Government", RU0000074, Box no. 159, Smithsonian Institution Archives (SIA), Washington D. C. Shanti, an Indic word means peace, and Ashok, an emperor who ruled nearly all of Indian subcontinent during 268-232 BCE, is emblematic of truce and harmony.

after, the union began to push for greater control over the forest and wildlife. The votaries of conservation—natural historians, planters, and erstwhile princely state rulers—were the protagonists of this view. Besides, they pursued the FD to undertake a series of efforts to keep the rural folks off the sanctuary to make it attractive for the tourists.[105] Several states including Assam vociferously defended their federal freedom to govern nature in the 1950s and 1960s. Despite its opposition against the Union government's intrusions in the conservation matters, the Government of Assam made notable efforts to make the Kaziranga Wildlife Sanctuary attractive to tourists. In the 1950s, it built modern tourists lodges, placed elephants for safari, and widely advertised the sanctuary.[106] However, it looked at the removal of graziers and fishers expediently.

Freeing the PAs like KNP from their agrarian environs has been the dominant conservation paradigm all over India after the independence.[107] Ramachandra Guha observes that the city-based environmental enthusiasts, ruling political elites, forest officials, international conservation organisations, and wildlife biologists unite to achieve this goal.[108] Guha holds the biologists from the first world nations responsible for displacing the forest-dwellers from various PAs. Guha is right that biologists' clamour for 'fortress conservation' lent considerable legitimacy to the FD accustomed to a regime of closure.[109] We need a closer

[105] For early advocacy, see Salim Ali, "The Great Indian One-Horned Rhinoceros in Assam Province in India," *Proceedings and Papers, International Technical Conference on the Protection of Nature*, 1950, 470-472.

[106] "Kaziranga Tourist Lodge", Press Note no. 146, 18 April 1955, file no. For/WL/39/55, 1955, Forest, ASA.

[107] It is in continuation of the colonial forestry policy examined in Guha, *The Unquiet Woods*; Rangarajan, *Fencing the Forests*; Sivaramakrishnan, *Modern Forests*; Saikia, *Forests and Ecological History of Assam*.

[108] Ramachandra Guha, "The Authoritarian Biologist and the Arrogance of Anti-Humanism: Wildlife Conservation in the Third World," *The Ecologist* 27, no. 1 (January/February 1997): 14-20. I will use the terms 'biologist' and 'ecologist' interchangeably in this discussion.

[109] Large PAs void of grazing, fishing, and forest produce collection continue to be the dominant model of wildlife conservation backed by the Wildlife (Protection) Act 1972. Evidence of limited human use promoting healthy conservation in Keoladeo National Park did not make it to scientific journals dominated by wildlife biologists. Michael Lewis, *Inventing Global Ecology: Tracking the Biodiversity Ideal in India, 1947-1997* (Athens: Ohio University Press, 2004), 211-217.

examination of how the exclusionary ideas with 'scientific' backing were mainstreamed, and operate in the PAs like KNP.

The role of science and ecologists in shaping the national parks and wildlife management was complex. We will discuss two aspects here. First, ecological science had very little bearing on the original enactment of the WLPA, a guiding framework of wildlife protection in India. Before this law came, there was very little ecological knowledge about the Greater One-horned Rhinoceros.[110] In the 1960s, the US ecologists equipped with cutting-edge research methods wanted to study the Kaziranga Wildlife Sanctuary (KWS). It did not materialise except for a short-duration survey.[111] From 1971, the Government of India shut the doors to the US ecologists, especially those trying to study charismatic mammals like rhino, tiger, and lion.[112] Officials in the Government of India's wildlife wing were keen on developing Indian expertise in wildlife ecology. They denied permission to the US ecologists to work in the Indian PAs.[113] However, even Indian ecologists trained in the Wildlife Institute of India (established in 1982) and elsewhere found it immensely difficult to procure required permissions to conduct their ecological research, especially on big mammals.[114] Nevertheless,

[110] Knowledge about the rhino ecology in KWS came from several observations not exceeding few weeks. S. Dillon Ripley, "Territorial and Sexual Behavior in the Great Indian Rhinoceros, a Speculation," *Ecology* 33, no. 4 (1952); E. P. Gee, "The Life History of the Great Indian One-horned Rhinoceros (R. *unicornis* Linn)." *JBNHS* 51, no. 3 (1953); E. P. Gee, "Further observations on the Great Indian One-horned Rhinoceros (R. unicornis Linn.)," *JBNHS* 51, no. 4 (1953); Lee Merriam Talbot, "A Look at Threatened Species: A Report on Some Animals of the Middle East and Southern Asia which are Threatened with Extermination," *Oryx*, 1959; W. Ullrich, "Zur Biologie der Panzernashorner (*Rhinoceros unicornis*) in Assam (On the biology of the Indian rhinoceros (*Rhinoceros unicornis*) in Assam)," Zoologische Garten 28, no. 5 (1964); J. Juan Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal," *JBNHS* 63, no. 3 (1966).

[111] Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal".

[112] It came in the aftermath of the US supporting Pakistan in the India-backed Bangladesh war of independence. In India, criticisms were building up since 1969 against the US-funded ecological studies in India as a cover to the US biological warfare programme. While the US decided to stop its aid to India, the latter refused to disburse the PL–480 funds that scientists relied on to conduct their research. For a detailed account, see Lewis, *Inventing Global Ecology*, 95-106.

[113] Lewis, *Inventing Global Ecology*, 164.

[114] M. D. Madhusudan et al, "Science in the wilderness: the predicament of scientific research in India's wildlife reserves," *Current Science* 91, no. 8 (October 2006); Shahabuddin, *Conservation at the Crossroads*, 81-97;

from the late 1970s, researchers produced several works on rhino's population dynamics, food preferences, reproduction, anatomy, territory, and habitat characteristics in various PAs in Assam.[115] In Thomas Kuhn's words, these works qualify to be called as "normal science".[116] In other words, although some of these works are meticulous and detailed, they do not modify the established norms and theoretical premises of wildlife ecology.[117] Vital information on rhino ecology still comes from the ecological studies conducted in the Chitwan National Park, Nepal, from the late 1970s.[118]

Raghu Chundawat, a wildlife biologist's account is packed with details of how the park authorities could not only be cold but hostile to the researchers. Raghu Chundawat, *The Rise and Fall of the Emereld Tigers: Ten Years of Research in Panna National Park* (New Delhi: Speaking Tiger, 2018); Chundawat's horror with the authorities in the Panna National Park, Madhya Pradesh was mirrored by Valmik Thapar, a wildlife photographer, writer, and conservationist about Ranthambore National Park, Rajasthan. See Valmik Thapar, *Saving Wild India: A Blueprint for Change* (New Delhi: Aleph, 2015), 96-103.

[115] Kamal Chandra Patar, "Food preferences of the one horned Indian rhinoceros Rhinoceros unicornis, in Kaziranga National Park, India" (M.Sc. diss., Michigan State University, East Lansing, 1977); Birendra Kumar Bhattacharya "Studies on Certain Aspects of Biology of the One-horned Rhinoceros" (PhD diss., Gauhati University, Guwahati, 1991); Arup Kumar Dutta, *Unicornis: The Great Indian One-Horned Rhinoceros* (New Delhi: Konark Publishers, 1991); Rajendra G. Garawad, "Understanding the population dynamics of Great Indian One-Horned Rhinoceros *(Rhinoceros unicornis)* of Kaziranga National Park, Assam, India" (MSc. diss., Bangor: Bangor University, 2009); B. C. Hazarika and P. K. Saikia, "A Study on the Behaviour of Great Indian One-horned Rhino (*Rhinoceros unicornis* Linn.) in the Rajiv Gandhi Orang National Park, Assam, India," *NeBio* 1, no. 2 (2010): 62-74; Jasmine Bharali, "A study on Ecological Status of the Wetlands of Kaziranga National Park" (PhD diss., Gauhati University, Guwahati, 2010); Ramesh Bhatta, "Ecology and Conservation of Great Indian One Horned Rhino (Rhinoceros unicornis) in Pobitora Wild Life Sanctuary, Assam" (PhD diss., Gauhati University, Guwahati, 2011); Sangita Medhi, "Studies on the behavioural aspects and population demography of Great Indian One-Horned Rhinoceros *(Rhinoceros unicornis)* in Kaziranga National Park, Assam" (PhD diss., Gauhati University, Guwahati, 2020); for an exhaustive list of works on the rhino, see Deba Kumar Dutta and Rita Mahanta, "Studies on Greater one Horned Rhinoceros Behaviour and Ecology with Special References to Wild to Wild Translocated Rhinoceros: A Review," *The Indian Forester* 144, no. 10 (2018).

[116] Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: The University of Chicago Press, 1970, First Published in 1962).

[117] Examples of works that exceeded 'normal science' on Indian wildlife include George B. Schaller, *The Deer and the Tiger: A Study of Wildlife in India* (Chicago: The University of Chicago Press, 1967); Raman Sukumar, *The Living Elephants: Evolutionary Ecology, Behavior, and Conservation* (New York: Oxford University Press, 2003), 316; Joslin, "The Environmental Limitations and Future of the Asiatic Lion," 648-64. These works challenged the established paradigm of separating humans from nature as the key to protect nature. Schaller and Joslin showed that tigers and lions were highly dependent on domestic livestock as their prey. Sukumar explained why elephants raid crops and only the solitary rogue ones killed humans.

[118] The most influential work is Eric Dinerstein, *The Return of the Unicornis: The Natural History and Conservation of the Greater One Horn Rhinoceros* (New York: Columbia University Press, 2003); this work

Secondly, ecologists and conservationists did not have an easy-going influence over the forest officials. From the early 1950s, the former made desperate calls to remove all human interference from the PAs.[119] However, it was impolitic for the Government of Assam until the late 1960s.[120] Elsewhere, in Kanha National Park and Gir Forest Sanctuary, ecological studies in the late 1960s were followed by removal of villagers and pastoralists.[121] Mistrust, hostility, and suspicions abound between the ecologists and the government officials, even in reasonably 'researcher-friendly' PAs like Kalakad Mundanthurai Tiger Reserve (KMTR), Tamil Nadu.[122] Ecologists and conservationists have documented forest officials' and government's aversion to accept wildlife census if the numbers would lead to public criticism.[123] The former alleged that before the Sariska Tiger Reserve and Panna Tiger Reserve lost all their tigers during 2005–2009, forest officials refused to admit that numbers were depleting. These differences aside, ecologists and conservationists favouring human-free PAs are ideologically united with forest officials in upholding the exclusionary paradigm.

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was preceded by William Andrew Laurie, *The Ecology and Behaviour of Greater One-horned Rhinoceros* (PhD diss., University of Cambridge, Cambridge, 1978).

[119] Ali, "The Great Indian One-Horned Rhinoceros in Assam Province in India," 470-472; Talbot, "A Look at Threatened Species," 202-203; E. P. Gee, "The Management of India's Wildlife Sanctuaries and National Parks, Part III," *Journal of Bombay Natural History Society* 54, no. 1 (1956).

[120] Removal of the graziers and other forest users from the KWS began in the late 1960s. These initiatives were at the backdrop of local contingencies and regional politics instead of the pressure from conservationists alone. We will discuss this aspect in detail in chapter 3.

[121] Government of Madhya Pradesh relocated villagers from the Kanha National Park in the late 1960s. See M. K. Ranjitsinh, *A Life with Wildlife: From Princely India to the Present* (Noida: HarperCollins, 2017), 105-106; it was after Schaller's study (1963-1965), Schaller, *The Deer and the Tiger*. In Gir Forest Sanctuary, following Stephen Berwick and Paul Joslin's ecological studies (1969-1971), the Government of Gujarat relocated some Maldhari graziers, Ravi Chellam, "The Lions of Gir," in *The Lions of India*, ed. Divyabhanusinh (Ranikhet: Permanent Black, 2008), 233.

[122] For another illuminating account, see Rauf Ali, *Running Away from Elephants: Adventures of a Wildlife Biologist* (New Delhi, Speaking Tiger, 2018), 90-106.

[123] Chundawat, *The Rise and Fall of the Emereld Tigers*, 14; Thapar, *Saving Wild India*, 100.

However, alternate ways and aims of conservation have evolved too. Conservationists have begun to take a more composite view of the wildlife and the rural livelihood issues.[124] For example, Raman Sukumar, an elephant ecologist, established that a small number of rogue male elephants were chiefly responsible for the bulk of human deaths and crop damages.[125] Sukumar—a pragmatic conservationist in Mahesh Rangarajan's words—proposed that culling the rogue ones will reduce the human-elephant conflicts and help in long-term elephant conservation. Rangarajan outlines a range of other ways and aims of conservation which have emerged recently.[126] Rom Whitaker, a herpetologist, drew upon existing tribal skills of trapping snakes and rodents to provide them with better bargain in the exchange economy. The objective was to arrest reckless depletion of the resource base. Most of these alternatives have run into conflict with the dominant exclusionary paradigm supported by a law. Sukumar not only found it difficult to push the idea of culling rogue elephants through his brethren of ecologists,[127] but the forest officials too. Rogue elephants are killed in most Indian states only after significant damage and public outcry. The law itself is not a deterrent to cull the rogues. However, there is overwhelming support base among the urban conservationists in favour of not touching an endangered species like the elephant. Biologists found that removal of buffalos in the 1980s from the Keoladeo Ghana National Park filled its wetlands with weeds, and the bird population declined. This role of domestic buffalo to revitalise the wetlands for the birds did not make much difference to the

[124] *JPAM Update*, no. 1-17, September 1994–July 1998, a newsletter published by the environmental group Kalpavriksh, highlighted how PAs were entangled with rural livelihood issues. From October 1998 (no. 18), it was renamed as *Protected Area Update (PAU)*. The editorial in *PAU*, no. 18, (October 1998), discusses the threat of tribal displacement due to WWF's petition in the Supreme Court. The Editorial in PAU, no. 41–42, (April 2003), takes an expansive and historical view of tribal rights on the violent conflict in Wynad Wildlife Sanctuary, Kerala.

[125] Raman Sukumar, "The Management of Large Mammals in Relation to Male Strategies and Conflict with People," *Biological Conservation* 55, (1991).

[126] For a detail analysis of alternate views on conservation, including those of the biologists, see the chapter "Politics of Ecology" in Rangarajan, *Nature and Nation*.

[127] For a discussion on Raman Sukumar's work, see Lewis, *Inventing Global Ecology*, 129-134.

conservation paradigm.[128] Biologists have been thinking beyond the PA-based exclusivist approach as conservation measures.[129] They argue that ecological specificities of species and local complexities must inform conservation approach instead of one-size-fit-all kind of solution. The WLPA enacted in 1972 embodied a 'hands-off' approach and successfully kept any conflicting scientific evidence at bay.

The chronology is crucial here. The WLPA came before most of the ecological studies.[130] In other words, the call for human-free PAs was written into an overarching wildlife legislation ahead of any significant ecological study. While the working of the WLPA has generated a good deal of scholarship,[131] its discursive past has not. There have been minimal efforts in historicising the WLPA and the arena of legal contestations it brought forth. This study tries to fulfil this yawning gap. The KWS provides an important window to reconstruct this past. By historicising the coming of the WLPA and judicial intervention around it, this work illustrates how a particular kind of cultural view of nature got inscribed into a piece of legislation at a crucial political moment.

The WLPA not only guides wildlife conservation in India, it has changed the arbiter of the conflicts around the PAs. From the 1990s, the Indian higher judiciary showed an increasing interest in protecting the national parks and sanctuaries.[132] The courts have

[128] Lewis, *Inventing Global Ecology*, 212.

[129] See essays in Rangarajan et al, *Nature Without Borders*.

[130] Only significant ecological study before the law was passed was Schaller, *The Deer and the Tiger*.. Despite Schaller's deep concern against the livestock in the PAs, he suggested "a gradual reduction" of livestock as a sudden removal would starve the tiger from their prey base (pp. 328-329).

[131] For an early critique arguing inadequacy of the WLPA to protect wildlife, see M. Krishnan, "The Wild Life (Protection) Act of 1972: A Critical Appraisal," *Economic and Political Weekly* 8, no. 11 (March 1973); on the working of the WLPA, see Chhatre and Saberwal, *Democratizing Nature*, 107; Michael Lewis, "Globalizing Nature: National Parks, Tiger Reserves and Biosphere Reserves in Independent India," in *Civilising Nature: A Global History of National Parks*, ed. Patrick Kupper, Sabine Hohler, and Bernhard Gissibl (Oxford: Berghahn Books, 2012), 236-237.

[132] K. Sivaramakrishnan, "Environment, Law, and Democracy in India," *The Journal of Asian Studies* 70, no. 4 (2011).

replaced the Assam's electoral politics that once played a decisive role in mediating the agrarian rights around the PAs. The judicial intervention has accelerated the process of disengaging the KNP from its agrarian milieu. This work also examines the stimulus to judicial intervention and the variations therein that have further consolidated an exclusivist conservation model. It probes how the judicial intervention affected an agrarian history peculiar to the floodplains. The KNP has emerged as an important wildlife tourism destination in India. However, the costs and benefits of this rise are shared unevenly across various groups. The settlement history of people, their relationship with the park, and entanglement with the law and judicial processes explain such unevenness.

The present thesis follows the trend in recent environmental histories of South Asia that focus on the regional variations and complexities. It does so by situating the KNP in the agrarian history and regional history of the Brahmaputra Valley. The conservation outcomes depended on the complex interactions among forests, pastures, fields, and commerce. If the KNP emerged through a range of agrarian contestations, it also drew from various moments in the regional history. In the 1950s and 1960s, the rhino and the KWS gave rise to an environmentalism that influenced the state's politics. In recent times, debates around the KNP have drawn from an anti-immigrant overtone pervasive in Assam's regional politics. The study traces the rise of the environmentalism around the rhino in the shifting currents of the regional history.

This Thesis

The thesis traces the contested rise of a heritage site, the KNP. The thesis asks: how did the conservation ideals interact with the environment, politics, and agrarian environs to concretise the idea of 'inviolate' nature in the KNP? To be sure, this idea of inviolate nature––seeded with the establishment of the Game Reserve—was slow to realize. It received a boost

in the post-independent imagination of nation through the elements of nature. How did the 'national' correspond to a vision of 'inviolate' nature in the Indian national parks? In the making of a heritage site, how the complex bureaucratic, legal, and conservation practices redefined the peasants' relationship with wildlife, commons, and forests? The objective behind the study is to situate the evolution of a heritage species (rhino) and site (KNP) in the political economy of natural resources like land, forests, and water bodies.

This work tries to fulfil some critical gaps in the history of national parks. In South Asia, national parks have not received adequate attention as much as the charismatic fauna like lion, tiger, and elephant. However, parks are more than charismatic animals, trees, foresters, and naturalists. The scholarship on North American and African national parks has underlined the workings of politics, culture, and capital in their making. This work adds the agrarian and ecological dimensions in the making of a national park. It begins with the premise that the national parks are deeply entangled in their agrarian and ecological milieu. The KNP and other PAs in the floodplains are distinctively so. The South Asian environmental history of forest is attentive to the agrarian dimensions and the related conflicts. However, these contestations appear localised, often at the periphery of the forests. This work shows that the contestations around the national park reflect much wider agrarian and ecological changes in space and time. It prompts historians, ecologists, and park managers to go beyond the changes in the immediate neighbourhood of the PAs to grasp the depth and scale of the conservation issues. Without such reflection, the apparent and rhetoric would blight our understanding of the conservation issues. For instance, the present-day struggle for land around the KNP, popularly branded as 'encroachment', can be traced to the colonial land settlement practices that underwent sharp changes in the post-independence decades. Such reflections complicate the simplistic view in conservation debates like the

good guys (park guards, conservationists) versus the bad guys (encroachers, fishers, trespassers).

Secondly, this work brings forth the ecological context in the evolution of the KNP. The idea of PAs revolves around neatly defined boundaries. However, the transient floodplains of the Brahmaputra made it impossible. More than the challenges offered by the volatile floodplains to maintain any fixed boundary, this thesis concerns the complexities inherent in the transient floodplains. The thesis narrates how law and conservation practices––presumed for the stable terrains—worked in the transient floodplains. It highlights the decades of legal and bureaucratic dilemma in governing the floodplains to conserve wildlife. It also prompts us to look beyond the boundaries as a panacea to achieve conservation goals. Lastly, the environmental histories of South Asia overwhelmingly concentrate on the colonial period. There are still others which examine the pre-colonial environmental changes. However, there are far fewer for the post-colonial period. This work details how the colonial initiatives of wildlife preservation acquired new meanings after India's independence. It foregrounds how nature's governance became a site of a power struggle between the union and state governments. This exploration adds valuably to the debates on the working of India's democracy which otherwise give a miss to nature.

The thesis is divided into four core chapters organised more or less chronologically, followed by a conclusion. Chapter 1 introduces multiple nineteenth-century forces and actors working in Assam's environments. The resultant environmental changes give a prelude to the coming of and a long career of the KNP in the twentieth century. The chapter shows that colonial idea of 'improving' a 'wild' province like Assam was deeply hostile to the mega-fauna. Colonial rule introduced tea and forestry, and boosted the existing forms of trade in wildlife products and cash crops. Tea, forestry, and peasant agriculture intertwined to reduce and fragment the wildlife habitat by the end of the nineteenth century.

Chapter 2 discusses the impetus and complexities in creating Game Reserves for rhino preservation on the fluid floodplains. The preservation thinking began on a cautious note that it should not come on the way of agricultural expansion. However, after the creation of the Kaziranga Game Reserve, a series of contestations surfaced around the use of natural resources and wildlife protection. The expansion of the Kaziranga Game Reserve (1911-1917) underscored the fissures within the imperial bureaucracy. These fissures exposed the multiple visions of how the province's resources should be utilised. The Game Reserves endured the bureaucratic cynicism and the 'dark clouds' of the political changes geared towards self-rule by the Indians. On the wake of rapid agrarian expansion from the 1920s, there was serious rethinking within the government around the design of game sanctuary. Despite the FD's wishes, it could not insulate the sanctuary from the graziers, fishers, and forest produce collectors. However, the social base for conservation began to increase from the late 1930s. Notwithstanding this, the game sanctuary passed on to independent India with many unresolved questions.

Chapter 3 discusses how in independent India, creating wilderness—void of any human presence and solely protected for its aesthetic value—gradually emerged as the dominant rationale of wildlife conservation. However, such rationale for conservation came in conflict with the federal structure of environmental governance in India. The most severe blow to such conservation ideals came from the peasants devastated by the ecological changes. However, the rhino and the sanctuary both began to stimulate environmentalism influencing the body politic of Assam. Such environmentalism lent crucial support to the FD to rapidly separate the sanctuary from its agrarian milieu from the late 1960s.

Chapter 4 discusses how the conservationists desire to create wilderness found expression in a national wildlife law amidst declining deliberative procedures of law-making in the 1970s. The WLPA, international conventions, and constitutional changes prepared a

ground in which the state governments' role in wildlife conservation was marginalised. From the 1990s, Indian higher judiciary tried to arbitrate the matters related to rights and settlement in the acquisition of land for national parks. In doing so, instead of drawing from the procedural integrity of the law, the judicial deliberations relied on the popular identity of the residents. The chapter shows how the issues and communities caught in legal struggle around the KNP have deep agrarian origins. The thesis ends with a concluding chapter.

The Sources

This thesis is based on a range of published reports, government correspondences, newspapers, natural history journals, legislative debates, wildlife writings, memoirs, private papers, literary works, court judgments, leaflets, maps, and interviews. Reports on Census, administration, agriculture, land revenue, forest, livestock, and wildlife conservation form the core of the published reports used here. The government correspondences housed in Assam State Archive (ASA), Guwahati include exchanges among the Government of Assam's various departments like revenue, forest, and police. Typically, these sources outline the guiding paradigms and predicaments behind various government decisions. Besides, they also help to estimate land use, population, revenue, and forest cover to analyse such decisions.

Private papers of leading conservationists like Salim Ali and S. Dillon Ripley show the early interaction of conservationists with the KNP. Journals like the *Journal of the Bombay Natural History Society*, *Indian Forester*, *Cheetal* and *Journal of the Society for the Preservation of the Wild Fauna of the Empire*, to name a few, help assess the science in wildlife conservation. This research reviewed the writings and memoirs of officials and conservationists like E. P. Gee, P. D. Stracey, Salim Ali and M. K. Ranjitsinh to outline the conservation ideals in the post-independence decades. The Assam Legislative Assembly

Debates (1949-1978, select years) highlight how the political class responded to the growing environmentalism around the rhino in Assam.

The written sources highlight political and social elites' views and engagement in conservation. However, sources are scant to understand the world of cultivators, graziers, fishers, and forest dwellers. The research relies on the Assamese proverbs and sayings besides latter-day accounts of the nineteenth-century plebeian world. A few records by planters and Christian missionaries—notwithstanding their prejudices towards the Indians—help reconstruct the rural life in the Brahmaputra Valley. The situation improves a bit as one enters the twentieth century. Few petitions from graziers and cultivators in the early twentieth century highlight their response to wildlife preservation. The petitions highlight their exceptional circumstances like eviction and wildlife depredation. However, these petitions also provide valuable clues to their everyday life when read alongside literary works. Published and unpublished autobiographies, memoirs, and fictional accounts were collected from many individuals and institutions around the KNP. These help in examining how the cultivators, graziers, and fishers engaged with the Game Reserve in its early days.

The situation improves markedly from the 1950s. With the rapid expansion of primary education and circulation of Assamese newspapers, peasants around the park actively voiced their difficulties and hopes related to conservation. The letters to editor and rural news items (mostly telegraphic) published in the Assamese newspapers like *Natun Asamiya* (1955-1965) and *Dainik Asam* (1966-1975) help to recreate the everyday life in the Kaziranga environs. In general, newspapers complement the drying government sources after the mid-1960s for information and discursive content. Interviews were conducted with the graziers and cultivators, some of whom were on the wrong side of the law. Interviews with journalists, police officers, activists, teachers, tourism workers, politicians, forest officials, and soil

conservation officials have aided the research. Interviews in the Karbi Villages in the south of the KNP, for which written sources are scant, are especially beneficial.

Chapter 4 is based on a close reading of the parliamentary debates, WLPA and its amendments, court judgments, and petitions. Memoirs of the conservationists such as M. K. Ranjitsinh and biographies of key personalities like Indira Gandhi illuminate the cultural likings infused in the WLPA. Many digital archives housing journals, newspaper articles, memoirs, reports, and pictures provided a large volume of references for the work.

Oral history and contemporary writings fill the increasing dearth of sources as one goes back in time to view the rural world. Although these accounts falter with date and chronology, the shifts, anxieties, and aspirations of the rural world appear vividly in them. The thesis begins by outlining the nineteenth-century changes in the Brahmaputra Valley. The colonial rule considerably reduced peasants' playing field. Besides, it modified their outlook towards the environment. These shifts colonial rule brought in peasants' lives impinged how the latter reacted to the conservation practices that began in the twentieth century. The thesis now enters to foreground those nineteenth-century changes in which the conservation practices unfolded in the twentieth.

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Chapter 1: The Empire and Mega-fauna in the Nineteenth century Brahmaputra Valley

Introduction

This chapter is a prelude to the twentieth-century career of the Kaziranga Game Reserve (later national park). It has two objectives. First, it aims to locate the advent of today's mega-fauna preservation sites (Kaziranga, Laokhowa, and Manas) in the nineteenth-century agrarian changes in the Brahmaputra Valley. Secondly, it introduces several forces contending with the novel idea of rhino preservation. The nineteenth-century Assam saw multiple political, agrarian, and environmental changes. Politically, the century began with the Burmese invasion followed by chaotic flight of people, transfer of power from the Ahom monarchy to the East India Company, and finally to the Crown. On the agrarian front, the colonial rule established land as individual property of the peasants. Moreover, the European fortune seekers acquired vast patches of land for tea cultivation. The growth of scientific forestry saw conversion of the jungles to economically beneficial timber plantations. The growth of agrarian and plantation economy both accompanied massive reordering of Assam's landscape.

The idea of 'improvement' was central to the colonial appropriation of land and natural resources. The idea promised prosperous future to the natives and colonisers alike provided they used the nature to produce commodities—like tea, coffee, indigo, sugar, and timber—which served the global market rather than the local subsistence.[1] Historical scholarship on the nineteenth-century Assam has analysed the role played by the tea

[1] Richard Drayton, *Nature's Government: Science, Imperial Britain and the 'Improvement' of the World* (New Delhi: Orient Longman, 2005, First Published in 2000), 87.

plantations, forestry, and agrarian expansion to make Assam a resource frontier.[2] These works discuss the change in demography, landscape, and peasant's access to natural resources. This chapter extends the scholarship to examine the fate of the fauna of the region––especially, the Greater One-horned Rhino (*Rhinoceros unicornis*)—that was at the centre of the preservation initiatives in the twentieth century.

My aim here is to examine how colonial rule first began the destruction of fauna in the Brahmaputra Valley before pushing for its conservation in the early 1900s. Historians explain the vanishing of mega-fauna through the colonial project of 'vermin' destruction, sports-hunting, and agricultural expansion.[3] While both guns and ploughs pushed back the fauna, there were regional variations and complexities. Only the European and Eurasian owned guns; the natives did not. There were no more than 2,100 Europeans and Eurasians, even at their highest in the province. They lived in a province of nearly 135,000 sq. km, an area that equals present-day Ireland, Switzerland, and Belgium together.[4] The tea planters—concentrated mainly in the eastern districts of Sibsagar, Lakhimpur, and Darrang—formed the lion's share of this population. While they indiscriminately sanitised their plantations from wild animals, their role outside needs a closer examination. Nor was there a constant expansion of agriculture. Only about one-sixth of the Brahmaputra Valley was under

[2] Amalendu Guha, *Medieval and Early Colonial Assam: Society, Polity and Economy* (Guwahati: Anwesha, 2015, First published in 1991); Jayeeta Sharma, *Empire's Garden: Assam and Making of India* (Durham: Duke University Press, 2011); Arupjyoti Saikia, *Forests and Ecological History of Assam, 1826-2000* (New Delhi: Oxford University Press, 2011); Rana P. Behal, *One Hundred Years of Servitude: Political Economy of Tea Plantations in Colonial Assam* (New Delhi: Tulika Books, 2014); Namrata Borkotoky, *Brewing Trouble or Transforming Nature? Making of Tea Plantations Environments in Assam, 1830s-1930s* (Unpublished PhD diss., Indian Institute of Technology Guwahati, Guwahati, 2021).

[3] Rangarajan, *Nature and Nation*, 46-85.

[4] In 1891, there were 2,082 Europeans and Eurasians in Assam province. E. A. Gait, *Census of India, 1891, Assam: Volume I – Report* (Shillong: Assam Secretariat Printing Office, 1892), 88.

cultivation at the end of the century.[5] Some peasants deserted their villages due to man-eating tigers and epidemics.[6] Nature came back rapidly to host the wild animals in such areas. A clearer picture of the nineteenth-century changes in the Brahmaputra Valley is possible only by considering the intertwining effects of 'improvement' practices, colonial revenue, and expansion of cultivation.

This chapter is divided into two parts. The first part shows that the idea and attendant practices of improvement in Assam were fundamentally antithetical to the presence of mega-fauna. Colonial government predicated the progress of the province upon the elimination of mega-fauna. The second part discusses how the colonial rule—through its revenue demands and zeal for agrarian expansion—changed mega-fauna's position in the peasants' world. To survive in the new conditions brought in by colonial rule, peasants had to align with the colonial hostility towards the mega-fauna. This chapter teases out various nineteenth-century colonial forces acting on Assam's environment and people. These forces and habits interacted in a complex way with the wildlife conservation practices in the twentieth century.

'Improvement' and Mega-fauna

In the first quarter of the nineteenth century, Assam saw the Burmese invasion, anarchy, and flight of the people. The East India Company government wanted to appear before the mass that it could restore law and order and take the province on the path of happiness and

[5] In 1901-02, 8,750 sq. km was under peasant cultivation and 820 sq. km was under the tea. Government of Assam, *Report on the Administration of the Province of Assam for the Years 1901-02* (Henceforth *RAPA Year*) (Shillong: ASPO, 1903), 12, 16.

[6] For peasants abandoning their villages due to man-eating tigers and wildlife see Gitashree Singh, "Hunting to Conservation: A study of British policies towards wildlife in Assam 1826-1947" (PhD diss., Assam University, Silchar, 2014), 22-23; also see Susan R. Ward, *A Glimpse of Assam* (Calcutta: Thomas S. Smith, City Press, 1884), 139; During 1891-1900, cultivated fields turned to 'wastes' due to epidemics in the Nowgong District, Edwards, *Report on the Land Revenue Settlement of the Nowgong District*, 3.

prosperity.[7] The erstwhile cultivated country ran over by jungle is an oft-quoted narrative in the early nineteenth-century European accounts of Assam. Such a narrative legitimised the Company's existence as a rescuer of the province from the jungle, adverse climate, and mega-fauna. The key to restoring order and ensure prosperity was to push back the forces of nature. "Before any material improvement in the salubrity of Assam can be effected," John M'Cosh, a Company surgeon, noted "it will be necessary to cut down and clear away the noxious jungle, to reclaim its waste lands by cultivation."[8] For the Company officials, settling the uncultivated province was almost synonymous with freeing the countryside from the wild animals.

As soon as the Company took possession of Assam, the European officials waged war against its fauna. John Butler, a Company official, wrote, "almost every military officer in civil employ becomes, if not from choice, at least in self-defense, a keen and skillful sportsman."[9] In a later account, Butler reminisced, "in one days [*sic*] sport it is no uncommon event for three or four sportsmen to shoot thirty buffaloes, twenty deer, and a dozen hogs, besides one or two tigers".[10] In nineteenth-century England, hunting was a privilege for only the royalty and aristocrats.[11] Colonial officials writing to their readers in England presented Assam as sportsman's paradise, otherwise referred to as a place of 'febrile miasmata and death'.[12] Assam's image as the sportsman's paradise attracted at least some Europeans. W. F. T. Pollok, a colonial military officer who served in Assam in the 1860s and 1870s, was one

[7] H. K. Barpujari, "Administrative Reorganization," in *The Comprehensive History of Assam: Vol. IV*, ed. H. K. Barpujari (Guwahati: Publication Board, Assam, 1992), 258-290.

[8] John M'Cosh, *Topography of Assam* (Calcutta: G. H. Huttman, Bengal Military Orphan Press, 1837), 117.

[9] John Butler, *A Sketch of Assam: With Some Accounts of the Hill Tribe* (London: Smith, Elder, and Co., 1846), 27.

[10] John Butler, *Travel and Adventure in the Province of Assam During a Residence of Fourteen Years* (London: Smith, Elder, and Co., 1855), 217.

[11] MacKenzie, *The Empire of Nature*, 17.

[12] Butler, *Travel and Adventure in the Province of Assam*, 215.

such sportsman. Pollok claimed that he bagged forty-four rhinos apart from assisting others in as many.[13]

The Company also roped in the peasantry to destroy the mega-fauna. In the 1830s, the Company announced rewards of two and a half rupees for every buffalo destroyed and five rupees for a tiger.[14] Initially, such rewards hardly attracted the peasants whose attitude towards wildlife was far from outright hostility. Butler wrote, "Such is the apathy and indifference of the natives to their own interests and preservation, that they seldom exert themselves to earn the gratuity …"[15] Wild animals were part of the peasantry's cultural, social, and material world. Peasants' attitude towards the wild animal was a mixed bag—one of awe and attraction both. Several Assamese proverbs deploy the hierarchy of the animal world to project the societal inequalities.[16] Others are reflective of their constant fear of tigers and leopards.[17]

If the peasants feared the powerful and violent tiger (or leopard), the deer was vulnerable and innocent. Thus, the deer hunt was less risky, popular, and communal affair. As the water in the Brahmaputra began to rise in April and the grassland submerged, deer looked for the highlands. People with "well armed canoes dash[ed] out into the stream, and spear them."[18] Hunting lasted for 4-5 days with abundant kills, mainly deer, sometimes

[13] Fitz William Thomas Pollok, *Fifty Years' of Reminisces of India: A Retrospect of Travel, Adventure and Shikar* (London, New York: Edward Arnold, 1896), 195.

[14] Butler, *A Sketch of Assam,* 20-21.

[15] Butler, *A Sketch of Assam,* 20-21.

[16] *Pahu dekhilei aagbarhe, bagh dekhile paas pore* (advances at the weak but turn its back to the mighty); *Kalaru kal biporit kal, horinai seleke baghor gal* (an unusual time when deer licks tiger's cheek). Syed Abdul Malik, *Raijor Mukhar Maat* [Sayings of the People] (Guwahati: Students' Store, 2018, First published in 1988), 83; for a detailed account of hunting by peasant in Assam, see Saikia, "The Kaziranga National Park".

[17] *Baghor powali* (Tiger's son), *bagh dhoka* (mode of punishment by striking of palms), *bagh jap* (tiger jump), *byaghramurti* (terrifying appearance like a roaring tiger), Malik, *Raijor Mukhar Maat*, 83.

[18] M'Cosh, *Topography of Assam,* 72; for a description of how the floods affected people, livestock, and fauna, see *Orunodoi*, July 1846, in Maheswar Neog ed. *The Orunodoi, 1846-1854* (Guwahati: Assam Publication Board, 1983), 52.

dozens together.[19] Deer venison was a distinct delicacy to the rich and poor alike: *horinar mangsoi boiri* (deer's flesh itself is its enemy). Assamese families still adorn their houses with deer horns and skin. In dry seasons, peasants hunted tigers, but deer too.[20] They developed elaborate techniques and equipment to suit the animal.[21] Singphos of eastern Assam shot poisoned arrows to kill elephants for ivory.[22] The Nagas dug 7-8 feet deep pits and erected wooden spikes to kill elephants and buffalo.[23] Assam's wild buffalos—most widespread and dreaded among the mega-fauna—had a special attraction among the Assamese peasants.[24] Instead of keeping male buffalo feeders, peasants drove their herds closer to the wild counterpart to maintain a healthy stock. In 1837, M'Cosh estimated 850 tamed buffalos in the Kamrup district.[25] Apart from milk, peasants used buffalos to plough.[26]

In the 1830s, even the most populous district like Kamrup had seven-tenths of its land under jungle and grass.[27] The cultivated fields were only small islands in the sea of grassland, thicket and forest teeming with tiger, leopard, elephant, and buffalo. Leopard often took daytime cover in the sugarcane fields around the villages. In the dark, typical of their

[19] Tarun Ram Phukan, *Shikar Kahini* [Hunting tales] (Ebook, n.d.) 6; Prasannalal Choudhury, *Shikar Nikar* (1988), 7.

[20] Butler, *A Sketch of Assam,* 20-21.

[21] Some of the techniques were *jaal sikar* (ensnaring deer or tiger), *daala sikar* (deer hunting using basket) and *dhanu sikar* (tiger hunting using a bow). The *berha jaal* (tiger net) was almost 2-3 times bigger than the *pahu jaal* (deer net) of 30- 40 feet long and 6 feet wide. Choudhury, *Shikar Nikar*, 17-21.

[22] M'Cosh, *Topography of Assam,* 44.

[23] A. J. Moffatt Mills, *Report on the Province of Assam* (Guwahati: Publication Board, 1984, First Published in 1854), 238.

[24] Choudhury, *Shikar Nikar*, 3.

[25] M'Cosh, *Topography of Assam,* 47.

[26] Francis Hamilton, *An Account of Assam*, edited by Suryya Kumar Bhuyan (Guwahati: Department of Historical and Antiquarian Studies (DHAS), 1987, First Compiled during 1807-1814), 62.

[27] M'Cosh estimated nearly 8,00,000 people were living in the Brahmaputra Valley, of which 3,00,000 alone lived in the Kamrup district. M'Cosh, *Topography of Assam,* 127-129; even in the 1850s, Valley's nine-tenths land was uncultivated. Estimated from Mills, *Report on the Province of Assam*, 5.

ecology, leopards prowled around villages, searching for cattle.[28] Elephants raided standing crops. It increased their nutrition intake and reduced long foraging hours.[29] Peasants in the Brahmaputra Valley adapted to such kinds of wildlife pillage. They guarded their crops against wildlife by burning fire, making noise, and beating drums. They covered their barns with nets to protect cattle from carnivores.[30] However, they scarcely resorted to attacking the wild animals or large-scale hunting. Unlike in many parts of the sub-continent, the Brahmaputra Valley did not have any caste or tribe solely associated with hunting or trapping. If things did not improve or the loss was awful, peasants, especially in western Assam, deployed *shikaris* (native hunters) to kill the buffalos and elephants with poisoned arrows.[31] Such tolerance towards crop-raiding elephants or cattle-lifting leopards was partly due to their inability to kill the latter at will. Until the twentieth century, firearms were out of reach of the Indians. Killing a tiger or leopard required the entire village to hold large nets and beat the jungle.[32] Justice was central to punishing an errant tiger. It is evident in the Assamese saying: *esho garu morile bagharu maran*, literally, if a tiger kills hundreds of cows, it also has to meet its death. While the phrase reflects justice in human society, it draws from what is inevitable in the animal world.

It is not to portray a romantic co-existence between the peasants and the mega-fauna in the period just preceding the colonial arrival. Instead, to highlight that peasants' attitude

[28] *Orunodoi*, December 1854, in Neog, *The Orunodoi*, 1254; for leopard ecology, see Odden et al., "Adaptable Neighbours," 6.

[29] An adult Asian elephant needs 160-240 kg of fresh plants daily, for which it forages for 12-18 hours in its natural habitat. A cultivated field provides it with concentrated, nutritious and palatable plants. Sukumar, *The Living Elephants*, 316.

[30] Montgomery Martin, *The History, Antiquities, Topography and Statistics of Eastern India, Vol III* (London: WM H. Allen and Co. Leadenhall-Street, 1838), 572; for protective nets, see *Orunodoi*, December, 1854 inNeog, *The Orunodoi*, 1254.

[31] Martin, *The History, Antiquities, Topography and Statistics of Eastern India, Vol. III*, 575-577. Such shikaris were peasants too.

[32] Butler, *A Sketch of Assam*, 20-21; Choudhury, *Shikar Nikar*, 17.

towards the fierce wild animals was far from outright hostility.[33] It was a complex relationship defined by a sense of justice, utilitarian needs, and food habits. The colonial rule introduced decisive breaks from the past in the ways the peasants dealt with wildlife. In the pre-colonial period, peasants had no restrictions to clear thickets and jungles in their surroundings.[34] Peasants burnt high grasses and cleared bushes in their surroundings to keep the carnivores away. However, the Company saw jungle-clearing as an evidence of cultivation and demanded revenue from the peasants. Unwilling to pay revenue for mere jungle-clearing, peasants in several places they did not clear their surroundings where carnivores took shelter.[35] These breaks, which altered peasants' relationship with their surroundings, are crucial to understanding their shifting attitude towards wildlife.

As the colonial regime established itself, peasants' dependency gradually shifted towards the new rule to deal with the mega-fauna. Peasants rushed to the nearest police station, civilian officer, or a planter seeking relief from a tiger or leopard. The Europeans usually responded by shooting the animal. The planters often lent their gun or gunpowder to the peasants, notwithstanding their dislike for the latter.[36] As Mahesh Rangarajan writes, such "protective hunts were deeply symbolic of the logic and rhetoric of empire, of brave white men defending hapless mothers whose children fell prey to wild beasts."[37] After the 1857 mutiny, the wary colonial government disarmed the masses that reinforced an image of the

[33] It was a sub-continental phenomenon even with kings. Rangarajan, *Nature and Nation*, 47-49.

[34] For a discussion on the pre-colonial peasants' land rights see next section.

[35] In 1859, the Collector, Darrang wrote to the Commissioner of Assam of tigers infested villages where the villagers were reluctant to clear grasses and thickets. See Singh, "Hunting to Conservation," 22, 26-27.

[36] *Orunodoi*, June 1846 and July 1854 in Neog, *The* Orunodoi, 48, 1173; for a planter's account, see George Barker, *A Tea Planter's Life in Assam* (Bombay and London: Thacker, Spink & Co., 1884), 88-89. Apart from the racial prejudices towards the Assamese as 'indolent', planters disliked the local peasants' reluctance to work as plantation labourers, Sharma, *Empire's Garden*, 63-64.

[37] Rangarajan, *India's Wildlife History*, 25.

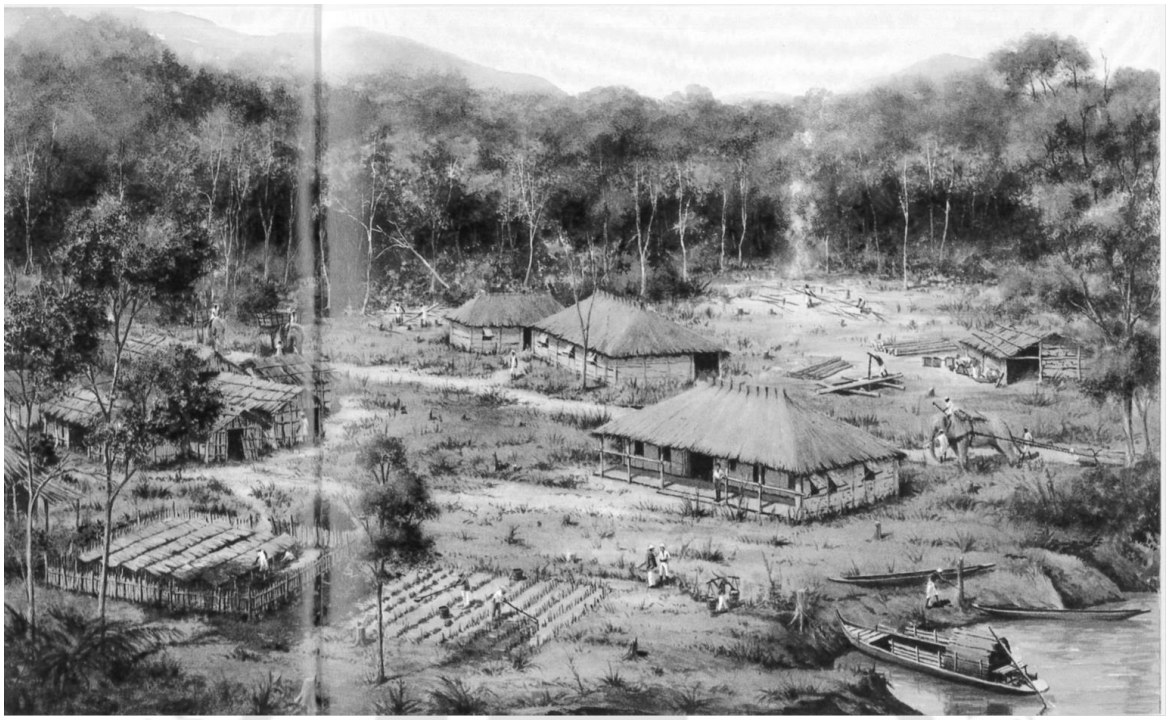

Figure 1.1: Sketch of jungle clearing to establish a tea station in Nazira, Sibsagar, 1840s.
Source: John Weatherstone, *The Pioneers, 1825-1900: The Early British Tea and Coffee Planters and Their Way of Life* (London: Quiller Press, 1986), 42-43.

Figure 1.2: Sketch showing how the European planters in India braved wild animals, circa 1880s.
Source: Weatherstone, *The Pioneers*, 68.

Indians as incapable of defending themselves from wildlife.[38] The Europeans branded the Assamese as 'indolent' and 'effeminate'. In the European view, the native peasants with meagre needs and aspirations could hardly be induced to conquer the forces of nature (fierce animals and jungle) to convert the jungles into cultivated tracts.[39] David Scott, Assam's first Company administrator during 1826–1831, encouraged the locally grown cash crops like silk, mulberry, and opium. However, his premature death in 1831 did not realise his plan. Francis Jenkins, who took over the province in 1834, reposed complete faith in the English capital and tea entrepreneurs to turn the province's fortunes.[40]

In converting Assam's jungles into the 'smiling gardens', planters rapidly destroyed and fragmented the fauna habitat. Eastern Assam districts like Sibsagar, Lakhimpur and Darrang districts became the major tea cultivation sites in the Brahmaputra Valley. From 25 sq. km in 1850, the area under tea gardens went up to 2,000 sq. km in 1890 and 2,500 sq. km in 1900.[41] The Bengal Census of 1872 reported about Assam that "the smiling tea gardens and neat bungalows of English planters are gradually usurping the haunts of the tiger and the bison."[42] Similarly, a planter noted in the 1880s, "in the neighbourhood of civilizations" (tea gardens), carnivores like tiger were rare.[43] The British view of smiling gardens was not because the planters fully converted their estates into manicured tea bushes. Actual tea acreage did not exceed one-third of the land under the tea gardens by the end of the century.[44] Gardens appeared smiling because they were now free from all wild animals. Planters rarely

[38] Rangarajan, *Nature and Nation*, 52-54.

[39] M'Cosh, *Topography of Assam,* 22; Butler, *A Sketch of Assam*, 134-135; Sharma, *Empire's Garden*, 61-65.

[40] Sharma, *Empire's Garden*, 33-34.

[41] Behal, *One Hundred Years of Servitude*, 339.

[42] H. Beverley, *Report on the Census of Bengal, 1872* (Calcutta: Bengal Secretariat Press, 1872), 124.

[43] Barker, *A Tea Planter's Life in Assam*, 212.

[44] In 1901-02, tea estates in the Brahmaputra Valley occupied 2780 sq. km of which only 820 sq. km were under acreage. Government of Assam, *RAPA 1901-02*, 16; Planters used the un-cropped areas for firewood, timber and bamboo. Barker, *A Tea Planter's Life in Assam*, 128.

tolerated wild pigs and jackals venturing into these uncultivated areas or workers' colonies. A planter wrote, "… it is only by the merest chance that he [wild pig] prevents a favourable opportunity for a shot."[45] A tiger or leopard entering the tea gardens met with the same fate.[46] As the planters continually expanded their holdings, the area sanitised from wild animals increased.

Since the 1860s, the colonial needs for timber paved the way for creating the Reserved Forests (RF). The FD articulated exclusive rights over the RF. FD prohibited grazing, cultivation, cattle trespass, and collection of forest produce inside the RFs, and increasingly criminalised the peasants for these.[47] The FD was equally intolerant towards the wild animals. The deer bit the trees and saplings in the autumn. FD treated the deer, monkey, and wild pig as pests and nuisance.[48] We may be disposed to think that vast patches of RFs could support a sizeable mega-fauna population. One of the key practices of scientific forestry was to deter any undergrowth of grass.[49] Some RFs like Nambor reached such perfection to ward off animals that "no regulation of grazing was necessary" as there was no grass.[50] Deer and bison failed to survive in the hundreds of square miles of the RFs with absolutely no grass.[51] The policy of keeping the wild animals off the RFs was not probably as successful as their cleansing in the tea gardens.

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[45] Barker, *A Tea Planter's Life in Assam*, 201-202.

[46] "There is not a moment to be lost if the horses are to be saved. A light is secured, rifles, together with all the odd firearms that can be speedily collected together, are distributed, and the procession starts for the stables …" Barker, *A Tea Planter's Life in Assam*, 212.

[47] Saikia, *Forests and Ecological History of Assam*, 310-314.

[48] For a general hostility towards wild animals in RFs, see Saikia, *Forests and Ecological History of Assam*, 223-231.

[49] Saikia, *Forests and Ecological History of Assam*, 221-222.

[50] A. R. Dicks and E. S. Carr, *Working Plan of the Nambor Reserved Forest of the Golaghat Range, Sibsagar Division, Assam, for a period of fifteen years from 1904 to 1919* (Shillong: ASPO, 1905), 11.

[51] It is a latter-day observation made in the 1930s by A. J. W. Milroy, who joined the Assam FD in 1909 and became a pioneer of wildlife conservation. A. J. W. Milroy, *Note on Game Preservation in Assam* (Shillong: AGP, 1934), 4.

A flourishing tea industry needed rapid communication to export tea and import labourers. Thus came the era of steam navigation on the Brahmaputra from the mid-nineteenth century.[52] River navigation dominated the flow of humans and goods between Assam and outside throughout the century.[53] The steam navigation brought in sailors, explorers, and hunters. They often proved to be a persistent threat to the mega-fauna on the Brahmaputra's floodplains. Wherever the steamer stopped, the Europeans relieved from the monotony of several days' journey by shooting buffalo, deer and fowl.[54] Some sailors, the most regular travellers in the steamers, became "splendid marksman" (shooter) while dealing with wild animals.[55] Food habits and lifestyles of the Europeans in the province are important avenues to examine forces affecting mega-fauna. For the Europeans, beef was hard to come by, as the Assamese rarely sold their cattle.[56] Tinned meat was expensive in Assam. A planter noted, "American meat (tinned) … sardines … are luxuries even to the wealthy members of the planting community."[57] Under such conditions, buffalo or deer meat broke the "inevitable chicken" monotony and made a "capital addition to the table."[58] Explorers and officials in missions hunted to overcome the shortage of provisions for their large troops.[59] From the early nineteenth century, many literary productions on hunting were in circulation carrying

[52] The first steamer reached Guwahati in 1847, and it was extended upto Dibrugarh in eastern Assam in the next decade. Subsequently, steamer frequency between Calcutta and Dibrugarh improved substantially. Barpujari, *The Comprehensive History of Assam: Volume IV*, 301-309; By the 1880s, Guwahati could be reached in three days from Calcutta and Dibrugarh in six days. Sharma, *Empire's Garden*, 80; Saikia, *The Unquiet River*, 172-180.

[53] Short distance railway services within Assam began only in the 1880s. From 1911, goods and passenger railway services between Assam and rest of India began. Sharma, *Empire's Garden*, 80-81.

[54] T. T. Cooper, an explorer, wrote, "our rifles were often brought to bear upon the large herds of wild buffalos making their way from the islands to the main bank of the [Brahmaputra] river." T. T. Cooper, *The Mishmee Hills* (London: Henry S. King & Co., 1873), 60-62.

[55] Cooper, *The Mishmee Hills*, 64-65.

[56] Cooper, *The Mishmee Hills*, 55.

[57] Barker, *A Tea Planter's Life in Assam*, 109.

[58] Barker, *A Tea Planter's Life in Assam*, 54, 109.

[59] For instance, see Cooper, *The Mishmee Hills*, 177-78.

information for sportsmen.[60] In the 1860s, western Assam and the Dooars region were at three days travel by steamer from Calcutta. The jungles around the Manas River became superb stops for hunting rhinos, tigers, elephants, and buffalos.

Mega-fauna in the western Assam were subject to the proximity of the Cooch Behar princely state and several zamindari estates. Rangarajan observes, "in their zeal for large bags, many princes outstripped their British masters."[61] The Dooars jungles and floodplains of the Brahmaputra in western Assam were favourite hunting grounds of the Maharaja Nripendra Narayan Bhup of Cooch Behar. The Maharaja claimed to have bagged 365 tigers, 311 leopards, 207 rhinos, and over a thousand other mega-fauna during 1871–1907.[62] The princely states negotiated patronage from the Viceroy by inviting them to hunt in their territory.[63] In 1905, the Maharaja invited Lord Curzon to shoot in his hunting ground.[64] Princely states often used such hunts to assert power in an otherwise circumscribed environment and extract favours from the colonial elites.[65] The Goalpara zamindars formed another privileged group of hunters in western Assam.[66] However, wildlife was not just subject to elite hunting and 'improvement' efforts of tea and forestry.

From the pre-colonial period, hunting interacted closely with the merchant capital, especially in western Assam. Assam had a long history of the domestication of elephants. The Ahom monarchs patronised writing elephant treatise *Hastividyarnava*.[67] Elephants were part of the war booties, royal gifts, and ivory-craft industry. The expanding seventeenth-century

[60] *Oriental Sporting Magazine* was one such circulation.

[61] Rangarajan, *India's Wildlife History*, 38.

[62] The Maharaja of Cooch Behar, *Thirty-Seven Years of Big Game Shooting in Cooch Behar, The Duars and Assam* (London: Bennet, Coleman & Co., 1908), 449.

[63] Rangarajan, *India's Wildlife History*, 44.

[64] Maharaja of Cooch Behar, *Thirty-Seven Years of Big Game Shooting*, 386-395.

[65] Hughes, *Animal Kingdoms*, 4.

[66] Saikia, "The Kaziranga National Park", 115.

[67] Saikia, *Forests and Ecological History of Assam*, 278.

Mughal Empire looked eastward for elephants for its military.[68] In the 1830s, Assam exported an estimated 700-1000 elephants annually at an average price of Rs. 300 to other parts of India.[69] Pre-colonial forms of trade on wildlife received a boost during colonial rule. Ivory was an important item of export throughout the nineteenth century. Besides, buffalo horn and hide joined the list from the second half of the century.[70] By the 1870s, the ivory trade went firmly into the hands of the Marwari merchants who imported it from the neighbouring hills.[71] With improved navigation facilities, all the districts in the Brahmaputra Valley engaged in this trade.[72]

As our subsequent chapters will discuss the Kaziranga National Park, a site of rhino preservation, a brief discussion about the species is in order here. Despite its impressive size and power, the rhinoceros played an inferior role in the history of animals in South Asia. Although the rhino has a strong presence in Indian art and architecture, it never became the mount of any God.[73] During colonial period, the rhino was subject to competition among the Europeans to bag the biggest trophy (Figure 1.3). Paradoxically, even as the rhino captured the Assamese imagination in the second half of the twentieth century, it is rarely found in the Assamese lore.[74] Silence in literature does not mean there was no interaction. All classes of people could eat rhino meat.[75] After selling the horn and hide, the Dhubri hunters reportedly took away the meat. M'Cosh wrote, "Great sanctity is attached to the horn; so much so that

[68] Trautmann, *Elephants and Kings*; for the Mughal attempts to subordinate the Ahoms for elephant and forest products, see Suryya Kumar Bhuyan, *Kamrupar Buranji* (Guwahati: DHAS, 1958), 40-42.

[69] Saikia, *Forests and Ecological History of Assam*, 279.

[70] Mills, *Report on the Province of Assam*, 282.

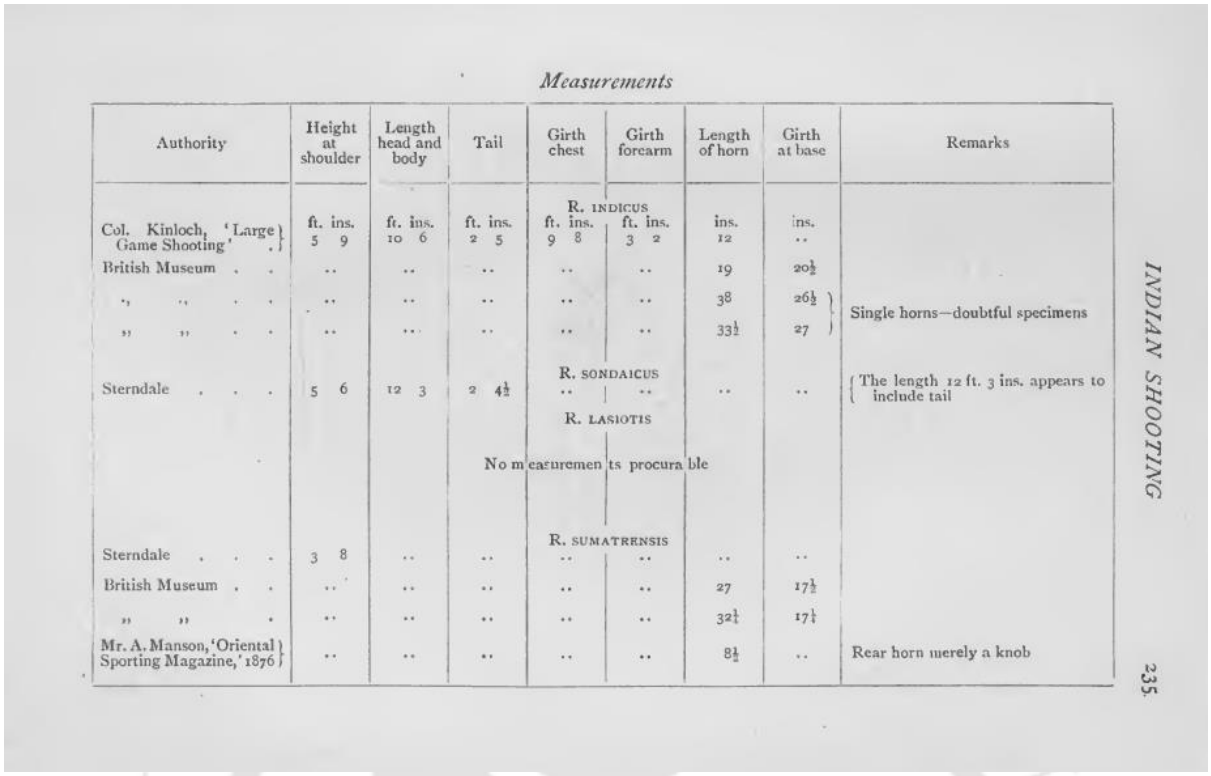
[71] Government of Assam, *RAPA 1876-77* (Shillong: Assam Secretariat Press (ASPr), 1878), 83.

[72] W. W. Hunter, *A Statistical Account of Assam: Volume I* (London: Trübner & Co., 1879); W. W. Hunter, *A Statistical Account of Assam: Volume II* (London: Trübner & Co., 1879).

[73] Joachim Karl Bautze, "The Problem of the Khadga (*Rhinoceros unicornis*) in the light of Archaeological finds and Art," 1985, cited in Bose, *Mega Mammals in Ancient India*, 23.

[74] Saikia, "The Kaziranga National Park"; Barbora, "Riding the Rhino".

[75] "The Rhinoceros", *Orunodoi*, October 1846, in Neog, *The Orunodoi*, 83-84.



Measurements

Authority	Height at shoulder	Length head and body	Tail	Girth chest	Girth forearm	Length of horn	Girth at base	Remarks
				R. INDICUS				
Col. Kinloch, 'Large Game Shooting'	ft. ins. 5 9	ft. ins. 10 6	ft. ins. 2 5	ft. ins. 9 8	ft. ins. 3 2	ins. 12	ins. ..	
British Museum	..	..	..	..	..	19	20½	
,, ,,	..	..	..	..	..	38	26½	Single horns—doubtful specimens
,, ,,	..	..	..	..	..	33½	27	
				R. SONDAICUS				
Sterndale	5 6	12 3	2 4½	..	..	..	..	The length 12 ft. 3 ins. appears to include tail
				R. LASIOTIS				
				No measurements procurable				
				R. SUMATRENSIS				
Sterndale	3 8	..	..	..	..	..	..	
British Museum	..	..	..	..	..	27	17½	
,, ,,	..	..	..	..	..	32½	17½	
Mr. A. Manson, 'Oriental Sporting Magazine,' 1876	..	..	..	..	..	8½	..	Rear horn merely a knob

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Figure 1.3: A table showing the record size of body and horn of various species of the rhino. Source: Clive Phillips-Wolley, *Big Game Shooting: Volume II* (London: Longmans, Green, and Co., 1894), 235.

Figure 1.4: Clara's exhibition in Venice, 1751.
Source: Rhino Resource Centre (RRC).

the general belief is that there is no more certain way of ensuring a place in the celestial regions than to be gored to death by the horn of the rhinoceros."[76] While other contemporary accounts corroborate the holiness of the horn, the second part of the statement appears an overstatement. An early twentieth-century Assamese traditional medicine book prescribed rhino meat and blood to cure women infertility and infant mortality.[77]

Early colonial observers like M'Cosh and Butler saw that some people in Assam tamed rhinoceros calves.[78] M'Cosh wrote in 1837, "old ones are frequently killed for their skin or their horn". Butler noticed people grazing tamed rhinos near Guwahati, presumably in the 1840s. M'Cosh speculated exporting rhinos alive to Europe because of its exotic value. Only eight rhinos reached Europe throughout the eighteenth century, and all were from India. Until the mid-eighteenth century, Europeans doubted the existence of a species like the rhino. In 1741, a Dutch sailor brought 'Clara'—a young rhino calf caught in Assam—to Europe. Clara toured various countries in Europe from 1741 to 1758 and entertained the crowds (Figure 1.4).[79] However, capturing a calf invariably in the company of its mother was not easy. M'Cosh noted that even when the mother was shot, it died holding the calf with her teeth, wounding the latter to death. Butler found the owners selling rhino at Rs. 100–150 each. Once they reached Calcutta, they were worth Rs. 500 each. However, catching, nursing, and the cost of transporting it to Calcutta proved exorbitant. Despite these difficulties, a few live rhino calves reached Calcutta.[80]

[76] M'Cosh, *Topography of Assam*, 45.

[77] Gangaram Das Tahsildar, *Baidya Amar* (Tezpur: Bhaskar Prakashan, 1910), 92.

[78] M'Cosh, *Topography of Assam*, 45; Butler, *A Sketch of Assam*, 28.

[79] The European soil did not see a rhino from the third to the sixteenth century AD. The rhinos brought in by Romans were lost before that. Glynis Ridley, *Clara's Grand Tour: Travels with a Rhinoceros in Eighteenth-Century Europe* (New York: Glove Press, 2004).

[80] Butler, *A Sketch of Assam*, 28.

Rhino horn did not feature in the export list of the Brahmaputra Valley until the late 1830s.[81] However, Assam might have exported rhino horn to Tibet even before that.[82] In 1838, for the first time, rhino horn and hide as items of trade were recorded at Rangpur, a town bordering western Assam.[83] Dhubri-based merchants controlled the rhino trade by employing hunters in Rangpur and Assam. A rhino cost Rupees 6 on the spot.[84] The first systematic appearance of rhino horn in Assam's export table is in A. J. M. Mill's report in 1854 (See Table 1.1). Mills estimated that in 1853, Goalpara, Sibsagar, and Lakhimpur exported nearly 520 kilograms (kg) of rhino horn valued at Rs. 4,480, presumably to Bengal. No less than 500 rhinos could have fallen annually to meet this volume. The rhino horn trade confined mainly to the western Assam in the early colonial years and spread to the eastern Assam by the 1850s.

Table 1.1: Estimates of export of rhino horn from select districts of Assam, 1853-1872[85]

District	1853		1868-69	1869-70	1870-71	1871-72	1872-73
	Volume in kg	Value in Rupees	Volume in kg	Volume in kg	Volume in kg	Volume in kg	Volume in kg
Goalpara	280	1680	320	240	360	480	440
Sibsagar	60	600	-	-	-	-	-
Lakhimpur	180	2200	-	-	-	-	-
Total	520	4480	320	240	360	480	440

[81] See the list of items exported from Assam in 1808-09, Hamilton, *An Account of Assam*, 48; Rhino horn does not feature in export list for Hadira Chawki, Goalapara from 1832-1835, R. Boileau Pemberton, *Report on the Eastern Frontier of British India* (Calcutta: Baptist Mission Press, 1835), tables 12-14.

[82] In the early nineteenth century, the Tibetan traders bought rice, silk, otter skins, and buffalo horns, amongst others, from the Assam traders. Tibetan traders also bought rhino horn from the traders of Upper "Hindoostan" and sold in China. Therefore, the omission of rhino horn as a traded item with Assam could be an oversight or indicator of its nominal value. Pemberton, *Report on the Eastern Frontier of British India*, 176-177.

[83] Martin, *The History, Antiquities, Topography and Statistics of Eastern India, Vol. III*, 711.

[84] These hunters were peasants and devoted part of their time to hunting. Martin, *The History, Antiquities, Topography and Statistics of Eastern India, Vol. III*, 574-575.

[85] Mills, *Report on the Province of Assam*, 282, 527, 650; for the years 1868-69 to 1872-73, see Hunter, *Statistical Account of Assam: Volume I*, 77.

Rhino horn trade at this scale was short-lived, not lasting more than a couple of decades. The price of rhino horn rose manifold in the late 1860s, sometimes fetching the hunter a price as high as Rupees 45 per kg.[86] Even the European military officials and hunters with pretensions for trophies and sport sold rhino horns.[87] W. W. Hunter's account of Assam in 1879 reported rhinoceros presence in the entire Brahmaputra Valley. However, he listed rhino horn as an export item only from Goalpara and Lakhimpur and gave the volume of export only for Goalpara.[88] The export lists of the 1880s and 1890s from the province mentioned buffalo horn and hides but no rhino horn.[89] It can be conjectured that as tea and forestry competed for land in eastern Assam from the 1870s, rhinos removed themselves to the remotest areas not easily accessible to the European hunters.

Mega-fauna in the peasants' world

If the tea estates and RF, both vehicles of improvement, were hostile towards the mega-fauna, these created new conditions for the peasants to survive the ever-increasing colonial revenue demands. The second half of the nineteenth century saw remarkable changes in the Brahmaputra Valley's land use. During 1851–1901, the area under peasant cultivation increased from 4,100 to 7,100 sq. km in the five *ryotwari* districts of Assam.[90] By 1901-02, 9,300 sq. km or fifteen per cent of the Valley was brought under tea and forestry.[91] Such was the rapidity of forestry enclosure in eastern Assam that during 1878–1902, 3,500 sq. km or

[86] Pollok, *Fifty Years' of Reminisces of India*, 197.

[87] Pollok wrote, "It was not till long afterwards that I took to selling the small horns, and thereby recouping myself all expenses, which were rather heavy." Pollok, *Fifty Years' of Reminisces of India*, 197.

[88] Hunter, *A Statistical Account of Assam: Volume I*; Hunter, *A Statistical Account of Assam: Volume II*.

[89] For example, see trade returns in Government of Assam, *RAPA 1880-81* (Shillong: ASPr, 1882); Government of Assam, *RAPA 1895-96* (Shillong: ASPr, 1896).

[90] Estimated from: Mills, *Report on the Province of Assam*, 5; A. Porteous, *Land Revenue Administration Report of the Assam Valley Districts for the Year 1901-1902* (henceforth *LRAVD Year*) (Shillong: ASPO, 1902), 26; five *ryotwari* districts were Kamrup, Darrang, Nowgong, Sibsagar, and Lakhimpur.

[91] Government of Assam, *RAPA 1901-02*, 16, 19.

one-tenth area in Lakhimpur, Sibsagar, and Nowgong districts was added to RF. The starkest changes came in the Sibsagar and south bank of the Lakhimpur district. Here, for every acre of peasant cultivation, there were two in the form of RF and tea plantation. Plantations brought enormous disruptions to peasants access to pastures, bazaars, and neighbouring villages.[92] Peasants' cropping patterns and landholding both changed substantially to accommodate the new situation. This section demonstrates how colonial rule induced the peasantry to the new forms of production, gradually changing their interaction with the mega-fauna.

A brief sketch of peasants' land rights and cropping patterns when the Company took control of Assam is necessary here. Before the Company's rule in Assam, peasants enjoyed hereditary rights over their homestead and garden land. However, the Ahom Kings managed the distribution of *rupit* (wet paddy) land. Every adult man received two *puras* (about 2.67 acres) of *rupit* or *ga-mati* (land attached to the person) for his mandatory service of three to four months to the State. The *rupit* land was not inheritable among the *paiks*. Apart from the homestead and *rupit* land, peasants could prepare *faringati* holdings to grow dry season crop. No revenue was payable against *faringati*. Once it became suitable for paddy cultivation, the Ahom king managed its distribution.[93] *Paiks* also had free access to the unoccupied dry land for grazing, fuelwood, and collection of building materials. However, mandatory labour obligation to the State could have seriously restricted a *paik*'s ability to exceed 4-5 acres of holding.[94] Peasants grew paddy, mustard, pulses, oilseeds, beetle nuts, peppers, sugarcane, cotton, and oranges. The most dominant crop was *sali* (transplanted winter paddy), which formed nearly three-fourths of all the crops. *Matikalai* was the most commonly grown

[92] For a discussion, see Borkotoky, *Brewing Trouble or Transforming Nature?*, 47-48.

[93] Jahnabi Gogoi (Nath), *Agrarian System of Mediavel Assam* (New Delhi: Concept Publishing Company, 2002), 35-46.

[94] Guha, *Medieval and Early Colonial Assam*, 54-56.

pulse.[95] Although paddy was the dominantly grown crop, it does not appear in Hamilton's list of export items of 1808-09. On the contrary, cotton comprised 27 and mustard 15 per cent of the total export value. Soon after the East India Company took control of Assam in 1826, volume and value of mustard export grew exponentially and far outpaced all other products.[96] Peasants paid land revenue to the Ahom king only when they failed to give their mandatory labour.[97] However, as the Company took over, peasants had to pay revenue against every kind of land. "Rice was grown by all, almost entirely for subsistence, but in the new cash economy introduced by the British, peasants needed marketable products."[98] To participate in the new cash economy, peasant's engagement with *faringati* intensified. But it was not just revenue payment in cash but its spiralling demand that altered this relation.

In the 1850s, Francis Jenkins, the agent of the Governor-general in Assam, was not in favour of increasing the land revenue exorbitantly.[99] This policy went through a substantial revision in the following decades. During 1867-68 to 1872-73, total demand on land revenue increased by one hundred per cent in the *ryotwari* districts. Amalendu Guha explains that like giving away far larger land for tea cultivation than the planters could crop, levying the peasants with very high land revenue "aimed at forcing the local farmers into acceptance of plantation employment." Despite such a steep hike in land tax, the results were limited. No more than 21,000 local peasants out of 307,000 labourers served the tea plantations at the end

[95] Hamilton, *An Account of Assam*, 60-62.

[96] In 1833-34, 17,586 maunds of paddy valued at Rs. 6,595 was exported from Hadira Chawki, Goalpara. But this formed only 2 per cent of total value of the export in the year. In the same year, mustard export recorded at Hadira Chowki was 83,547 maunds, valued at Rs. 62,593. In 1834-35, it increased to 1,62,704 maunds, valued at Rs. 1,62,704. See Pemberton, *Report on the Eastern Frontier of British India*, Table 12.

[97] Gogoi (Nath), *Agrarian System of Mediavel Assam*, 10.

[98] Sharma, *Empire's Garden*, 62.

[99] Francis Jenkins to A. J. Moffat Mills, Judge of Sadar Court, 23 May 1853, in Mills, *Report on the Province of Assam*, 61.

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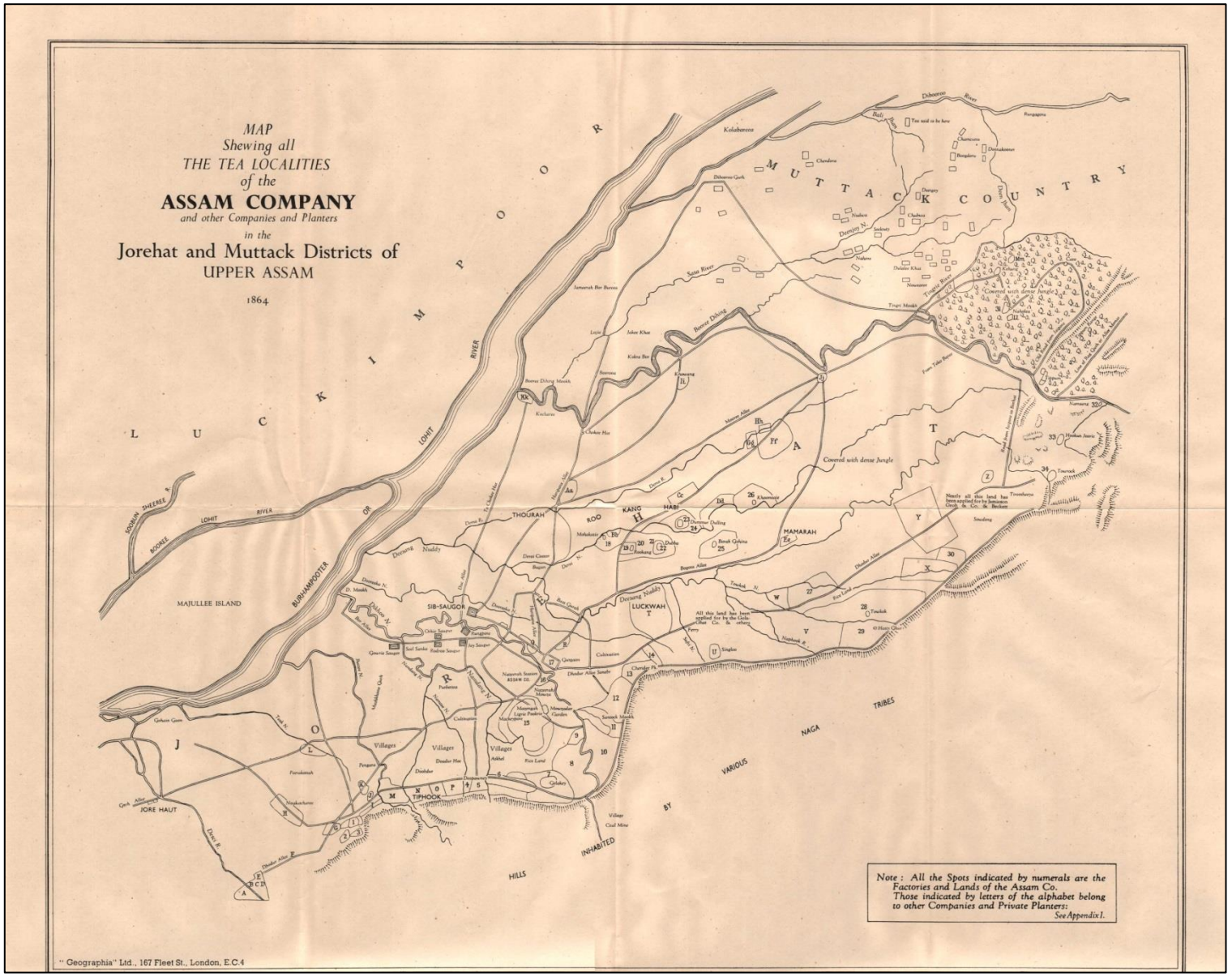

Figure 1.5: A map of the tea localities of the Assam Company in eastern Assam, 1864. The mushrooming tea gardens began to reduce the elbow room for the peasants. Source: H. A. Antrobus, *A History of the Assam Company, 1839-1953* (Edinburgh: T. AND A. CONSTABLE LTD., 1957)

of the nineteenth century.[100] However, the crushing burden of ever-increasing land revenue forced the peasants to grow more cash crops like mustard and jute.[101] Through land taxation, the colonial rule sought to characterise an ideal peasant.

> At the present day, a laborious and skilful husbandman in Darrang is able to cultivate twelve bighas or four acres of sali rice, four bighas or an acre and a quarter of mustard-seed, a similar area under pulses, and a bigha or about a third of an acre each of sugar-cane and vegetables.[102]

This industrious picture of a peasant masks his hardship brought in by the RFs and tea gardens. Revenue officers in the 1860s and 1870s comforted themselves that "there is wide extent of all kinds of land available, and farmers can suit themselves."[103] However, the newly established FD in the 1860s did not tolerate shifting cultivation, although it softened its stand following peasant protests in the hills.[104] On the plains, "the ricefields of the Assamese peasantry began to be surrounded by large tea estates, almost entirely held by European planters."[105] Colonial revenue demands and shrinking availability of land in the immediate neighbourhood pushed the cultivators farther and farther from their villages. Peasants knew how to utilise nature's ability to replenish itself. In addition to their homestead and wet paddy land, peasants prepared *faringati* holdings by clearing reed and grass in the dry season to grow mustard, *matikalai*, and jute. After 3-4 years of cultivation, as the weeds became

[100] Guha, *Medieval and Early Colonial Assam*, 187, 231-232.

[101] Saikia, *Social and Economic History of Assam*, 90-91, 97; Sharma, *Empire's Garden*, 62.

[102] Hunter, *A Statistical Account of Assam: Volume I*, 131.

[103] Report of Deputy Commissioner (DC), Kamrup, enclosed in Commissioner of Assam's letter to the Secretary to the Government of Bengal, Revenue Department, 6 April 1872, p. 20, file no. 219, 1867-1873, Pre-1874 Files- Assam Commissioner's Office, ASA.

[104] Bela Malik, "The 'Problem' of Shifting Cultivation in the Garo Hills of North-East India, 1860–1970," *Conservation & Society* 1, no. 2 (2003).

[105] Sharma, *Empire's Garden*, 25.

dominant, peasants abandoned their *faringati* holding for fresh soil.[106] In 1875, *faringati* formed more than two-fifths of land under peasant cultivation.[107]

In the nineteenth century, mustard was the main cash crop among the peasants in the Brahmaputra Valley.[108] Colonial travellers recorded its export to Bengal even before the Company took control of Assam. This export grew manifold in the subsequent decades and in the 1870s, Goalpara and Kamrup led the mustard cultivation and together exported over 8,000 tonnes.[109] Hunter's account of 1879 shows that nearly forty sq. km in Sibsagar, Lakhimpur, and Kamrup was under mustard cultivation. However, he did not state the acreage in Goalpara that topped the production. Goalpara gradually shifted to labour-intensive jute cultivation as it received settlers from East Bengal.[110] Peasants in the labour scarce eastern districts took to mustard cultivation which was relatively less demanding of labour. In the last quarter of the century, acreage under mustard saw rapid growth, especially in Kamrup and Nowgong districts. In 1895-96, more than 700 sq. km in the Brahmaputra Valley was under mustard, 17 per cent higher than the average of the previous ten years.[111] Besides jute and mustard, peasants also grew sugarcane and *matikalai* in their *faringati* holdings. Double-cropping was nearly non-existent even until the early twentieth century.[112] It meant that peasants cultivated larger area for subsistence and to the pay taxes. They

[106] Reports of Assistant Commissioner of Barpeta and Jorhat enclosed in Commissioner of Assam's letter to the Secretary to the Government of Bengal, Revenue Department, 6 April 1872, pp. 15-16, 24, file no. 219, 1867-1873, Pre-1874 Files- Assam Commissioner's Office, ASA.

[107] Government of Assam, *RAPA 1874-75 & 1875-76* (Shillong: ASPr, 1877), 24.

[108] For production, investment and trade on mustard, see Saikia, *The Unquiet River*, 250-261.

[109] Kamrup exported 1,100 tonnes during six months ending February 1876. Hunter, *A Statistical Account of Assam: Volume I*, 58-59; from 1869-70, export from Goalpara district steadily increased from 8,300 tonnes, Hunter, *A Statistical Account of Assam: Volume II*, 70.

[110] Saikia, *Social and Economic History of Assam*, 90-91, 97.

[111] "Final forecast of the mustard crop in Assam for the year 1895-96", no. 7, March 1896, Revenue–A, ASP.

[112] In 1901-02, Assam's double-cropped area was 5.77 per cent against 12.15 per cent for British India, Arthur Gudley, *East India (Progress and Condition)* (London: His Majesty'S Stationery Office, 1904), 106.

cultivated a mixed bag of crops in various kinds of lands with a very scattered landholding to meet the new situation. A colonial revenue officer captured the pattern in the early 1870s:

> The ryot in Assam does not hold all his cultivation within a ring fence: his busti and garden lands may be situated in one village, he may possess two or three field of roopit land in another, say a mile or so off and a few more fields of roopit perhaps in a third village in another direction.Then as to his furringati lands he waits till the cold weather and joins a party of his fellow villagers in squatting on jungle land, may be two or three days' journey from his home.[113]

Such increasingly scattered peasant landholding is vital to understand the fate of fauna as the century progressed. Although Assam was fast moving towards becoming the "Empire's Garden",[114] it was not freed from the state of nature. Scattered landholding also meant that peasants walked through abandoned holdings and jungles—home to wildlife. In the last quarter of the nineteenth century, wild animals killed around 400 people annually in the province.[115] From the 1870s, the Government of Assam spent upward of Rs. 10,000 annually in rewards for destructing more than 750 wild animals, of which three-fourths were tiger and leopard.[116] Destruction of carnivores at such a scale reflects how the colonial rule successfully enlisted the peasantry through pressure on revenue and a regime of rewards to destroy wildlife. To be sure, the threat from wildlife in Assam was not illusory. To a great

[113] Report of Assistant Commissioner of Barpeta enclosed in Commissioner of Assam's letter to the Secretary to the Government of Bengal, Revenue Department, 6 April 1872, p. 19, file no. 219, 1867-1873, Pre-1874 Files-Assam Commissioner's Office, ASA.

[114] By 1871, tea gardens occupied nearly 3,00,000 acres in the Brahmaputra Valley. Guha, *Medieval and Early Colonial Assam*, 225; Indian tea production outdid China in the next decade. Sharma, *Empire's Garden*, 78.

[115] Figures for a few years in parenthesis as follows, 1874 (482), 1875 (419), 1880 (249), 1890 (415), 1891 (409), Government of Assam, *RAPA 1874-75 and 1875-76*, 39; Government of Assam, *RAPA 1880-81*, 1882, p. cxxii; Extract from the proceedings of the Government of India in the Home Department (Public), dated Simla, 10th November 1892, nos. 4-6, Home-A, 1893, Assam Secretariat, ASA.

[116] The government spent Rs. 12,120 in 1874 and Rs. 11,368 in 1875. Government of Assam, *RAPA 1876-77*, 36. For the year 1894-95, the figure stood at Rs. 12,055, Government of Assam, *RAPA 1895-96*, 66. In 1875 and 1876, the government paid rewards for the destruction of 772 and 800 wild animals, respectively. Of these, 1193 were tigers and leopards. Government of Assam, *RAPA 1876-77*, 36.

degree, it was also an outcome of patterns of cultivation pressed by colonial rule. The threat refused to cease even after more than half a century of a wild animal eradication program. In 1890-91, wild animals annually killed one in 27,000 persons in Assam—the highest proportion in a British Indian province. Besides, tigers killed more than 11,000 cattle in the province, which formed two-fifths of all cattle destroyed by tigers in British India.[117] Loss of cattle reduced the draught power vital to cultivation. For the peasants, carving out a safe living space and passage between their holdings was vital to their everyday life. Such an induced attitude towards mega-fauna cast a long shadow well into the twentieth century.

Along with the growth of forestry and tea, peasant cultivation grew substantially in the second half of the nineteenth century. During 1851-1901, peasants added 3,000 sq. km to cultivation in the five *ryotwari* districts of Assam.[118] This increase was sharper in the fourth quarter than in the third quarter of the century. Peasants added 2,100 sq. km during 1875-1901.[119] More than the increase in the area of cultivation, disturbance to wildlife probably came from greater permanency of the holdings. During the last quarter, settled cultivation increasingly replaced shifting cultivation. Expansion of RF and tea together shrunk the scope of shifting cultivation. The share of *faringati* in peasant cultivation fell from 41 to 33 per cent in the last quarter. In contrast, the share of *rupit* land increased from 50 to 60 per cent. Although the share of *faringati* declined during 1875-1900, one-third of all peasant cultivation was still under it. Moreover, there was a qualitative change in the nature of land the term *faringati* applied to. In the 1870s, *faringati* referred to the 'high-lying' land.[120] By the 1900s, the term applied to "all land not falling within either of the two former classes

[117] Extract from the proceedings of the Government of India in the Home Department (Public), dated Simla, 10th November 1892, nos. 4-6, Home-A, 1893, Assam Secretariat, ASA.

[118] Estimated from: Mills, *Report on the Province of Assam*, 5; Porteous, *LRAVD 1901-1902*, 26.

[119] Estimated from: Government of Assam. *Report on the Administration of Land Revenue in Assam 1875-76* (Shillong: ASPr, 1877), 25-26; Porteous, *LRAVD 1901-1902*, 26.

[120] Government of Assam. *Report on the Administration of Land Revenue in Assam 1875-76*, 30; Hunter, *A Statistical Account of Assam, Volume I*, 66, 254, 375; Government of Assam, *RAPA 1901-02*, 61.

[*rupit* and homestead]".[121] *Faringati* now included the low-lying floodplains where peasants grew *ahu* [122]or summer rice, sugarcane, mustard, and *matikalai*.[123] This shift from dry land to low-lying floodplains was ominous on a species like a rhino that prefers low-lying grassland.[124]

Rhino has an unusually small home range for its large size. A study in KNP in the late 1980s concluded that the home range for an adult female rhino was 4.0–6.5 sq. km and an adult male was 2.0–4.0 sq. km[125] These figures are comparable to the findings on the radio-collared rhinos in the Chitwan National Park, Nepal. Chitwan rhinos had a home range of 3.0 sq. km for male and 2.9 ± 0.9 sq. km for female.[126] Rhino home range in the KNP and Chitwan resemble younger ungulates rather than their counterparts in other mega-herbivores like Asian elephants (105–320 sq. km) and Sumatran rhino (50 sq. km). It is unfair to import rhino home range in today's prime habitats like KNP and Chitwan in recent times to reconstruct the nineteenth-century situation. Compared to these prime habitats, rhino home range in newly created and less-prime habitats like Bardia National Park, Nepal is much larger. For a male, it is 41.8 ± 4.4 sq. km and for a female, 25.1 ± 9.3 sq. km.[127] Towards the end of the nineteenth century, the scattered patches where rhino lived in Assam were hardly prime habitats. Therefore, rhinos probably used a larger territory as in Bardia but certainly not as small as the KNP and Chitwan. Yet, it is still safe to conclude that the rhino is not a large-range or wandering species like an elephant with overlapping habitat in human-

[121] Government of Assam, *RAPA 1901-02*, 61.

[122] A rice, broadcast in February-March and harvested before the monsoon.

[123] Edwards, *Report on the Land Revenue Settlement of the Nowgong District*, 7; Hart, *Land Revenue Settlement of the Sibsagar District*, 5.

[124] Ancient Indian literature also testifies that the rhino's preference of marshy land. Susruta referred to it as *kūlacara*, meaning living on the banks. Bose, *Mega Mammals in India*, 310.

[125] Bhattacharya, "Studies on Certain Aspects of Biology of the One-horned Rhinoceros," 126-128.

[126] Dinerstein, *The Return of the Unicornis*, 115-116.

[127] Dinerstein, *The Return of the Unicornis*, 115-116.

dominated landscapes.[128] Several nineteenth-century sources support this view. They refer to the rhino as "solitary animal"[129] and "found in the remotest jungles, far away from the haunts of man"[130]. Chitwan rhinos hardly go beyond 1 KM to raid crops. It resonates with nineteenth-century sources that it caused "no harm to crop or human being".[131] Rhino with a smaller territory and peculiar habit of defecating at the same place was vulnerable to hunting pressure. Pressure from agriculture probably came after the Europeans' bullets and native shikari's pits. But when the agriculture expanded to the floodplains, the rhino had to retreat or confine itself to only smaller pockets.

Although the landscape underwent decisive changes by the end of the nineteenth century, Assam's imagery of a wild country persisted, Most areas of the Brahmaputra Valley immune to the annual floods were turned into crop fields, RF, and tea garden, all sanitised from wild animals. The following excerpt in the annual report of administration of Assam in 1892-93 is illustrative of this ambivalence:

> Except at the points …, where hills impinge upon the Brahmaputra, the river flows between sandy banks, which are subject to constant changes for a breadth of about six miles on either side of the stream. Within this belt there is no permanent cultivation, nor any habitation but temporary huts erected by people who grow mustard on the *chur* lands during the cold weather, and an occasional Miri village. Beyond, the level of the alluvium rises, and tillage and population take the place of sandy flats covered with long grass. Little of this is seen from

[128] A few rhinos wander a great distance, but it is not the species behaviour. For a list of wanderers from the Rajiv Gandhi Orang National Park, Assam, see Hazarika and Saikia, "A Study on the Behaviour of Great Indian One-horned Rhino," 70.

[129] Martin, *The History, Antiquities, Topography and Statistics of Eastern India, Vol. III*, 574.

[130] Pollok, *Fifty Years' of Reminisces of India*, 194.

[131] Dinerstein, *The Return of the Unicornis*, 50; Martin, *The History, Antiquities, Topography and Statistics of Eastern India, Vol. III*, 574.

the river, and the traveller up the Brahmaputra receives the impression that the country is a wilderness untenanted by man...[132]

Interestingly, the annual reports on Assam repeated this paragraph to describe the valley until the 1920s.[133] The description indicates that as the nineteenth century ended, the alluvial belt free from the annual floods was nearly occupied by cultivation, RF, and tea gardens. The Brahmaputra's floodplains were the only remaining areas for expansion of cultivation. Besides the burden to cultivate jute, mustard, and *matikalai*, the floodplains supported a pastoral economy from the 1880s, especially in the dry seasons. In the 1880s, the imperial government actively encouraged Nepali settlers to cultivate in the sparsely populated areas of the Lakhimpur district.[134] But the prospects of the pastoral economy attracted them more, and the economy flourished within a short time.[135] The Nepali graziers added a new economy that was unknown in the province. The above description of Assam also suggest that wilderness was now limited to the Brahmaputra's floodplains. The floodplains would be the new theatre of conflict among cultivation, pasture and fauna conservation in the new century.

In 1889, the Chief Commissioner of Assam declared closed season from November to June for hunting in the RFs.[136] Without a range officer's permission, it was illegal to shoot inside the RFs. Floodplains and foothills continued to be the habitat for mega-fauna even in the twentieth century. Wherever hills descended directly on the floodplains, the wild animals

[132] Government of Assam, *RAPA 1892-93* (Shillong: ASPO, 1893), 2.

[133] Government of Assam, *RAPA 1901-02*, 2; Government of Assam, *RAPA 1921-22* (Shillong: ASPO, 1922).

[134] From Commissioner, Assam Valley Division to the Secretary to the Chief Commissioner of Assam, 8 May 1885, Revenue and Agriculture Department, July 1885, Proceedings of the Chief Commissioner of Assam.

[135] From 1888, the FD collected grazing tax from the Nepali herdsmen at the rate of 4 anas per buffalo. In 1891, government raised it to 8 anas for a buffalo and 4 anas for other horned cattle more than one year old. "Levy of Grazing Dues in the Assam Valley Districts." nos. 36-38, August 1891, Revenue–A, ASP; In 1899-1900, FD collected Rs. 17,000 from nearly 29,000 buffalos and 7,500 cows. Carr, *PRFA 1901-02*, 36-37.

[136] Saikia, *Forests and Ecological History of Assam*, 267.

found unhindered passage to the hills during the floods. Kaziranga and North Kamrup were two key areas that hosted wildlife at the dawn of the twentieth century. Moreover, floodplains in north Lakhimpur were sparsely populated and un-cultivated until the 1930s as compared to other areas.[137] Numerous herds of wild buffalos and a few rhinoceros survived in these floodplains at the end of the nineteenth century.[138] Similarly, the northern areas of Nowgong district "dotted all over with *bils* and marshes" with a small proportion of settled land served as wildlife habitat.[139] Even as there was a rapid expansion of agriculture, nearly one-third of it was temporary cultivation at the end of the century. Peasants quit their *faringati* land every 3-4 years, where grass and thickets reappeared soon to host wild animals. Thus, a sizeable share of temporary cultivation probably gave the wild animals some breathing space.

The nineteenth-century geopolitical concerns created isolated tracts without any human settlement. In the 1860s, the colonial administration did not want to cultivate the northern foothills of the Lakhimpur district. It feared that cultivation would expose the tracts to the invasion of the hill tribes.[140] Similarly, in the foothills in north Kamrup, peasants avoided setting up villages, fearing the Bhutia raids.[141] These forested foothills in the eastern Himalayas through which numerous rivers descended provided a safe habitat for wild animals.[142] In some areas, the government-led expansion of cultivation did not attract the peasants. In the 1890s, the government threw open 250 sq. km for cultivation in the Nambor Reserved Forest in eastern Assam. But, the peasants did not find the area attractive until the

[137] C. R. Pawsey, *Report on the Resettlement of the Lakhimpur District 1929-35* (Shillong: AGP, 1937), 18.

[138] B. C. Allen, *Assam District Gazetteers, Volume VIII, Lakhimpur* (Calcutta, City Press, 1908), 16.

[139] B. C. Allen, *Assam District Gazetteers, Volume VI, Nowgong* (Calcutta, City Press, 1905), 10-11, 21; Edwards, *Report on the Land Revenue Settlement of the Nowgong District*, 1.

[140] From the Commissioner of Assam to the Secretary, Revenue Department, Government of Bengal, 6 April 1872, file no. 219, 1867-1873, Pre-1874 Files- Assam Commissioner's Office, ASA.

[141] From J. C. Arbuthnot, DC, Sylhet to Secretary to the Chief Commissioner of Assam, (28 August 1903), no. 77, September 1905, Revenue–A, ASP.

[142] Allen, *Assam District Gazetteers, Volume VIII, Lakhimpur*, 16; S. P. Desai, *Report on the Land Settlement of the Kamrup District* (Shillong: AGP, 1930), 3.

post-independence period due to dense forests and frequent raids by the neighbouring Naga tribes.[143] As the FD shed their control and cultivators were slow to reclaim the land, wild animals found some breathing place. Currently, most PAs in Assam are located in the floodplains or the foothills.

Foraging habits and the ability of the mega-fauna to defend the charge from hunting and cultivation were decisive factors in their survival. Apart from receiving early political protection, elephants could survive on the bamboo plants in the RFs in Mikir and Cachar Hills, where grazing animals like deer and bison could not.[144] Rhino with high body mass and a swimmer is highly mobile and adaptable to changing forage conditions.[145] Besides, firearms could not easily pierce the thick rhino skin.[146] The wild buffalos were too "fierce and formidable to be robbed of their young with impunity". As they were always in herds, even if a mother was killed, securing a calf was difficult.[147] Sometimes, several bullets could not roll a wild buffalo.[148] As livestock grazing flourished in the floodplains and foothills, the carnivores found a new prey base.

Conclusion

The wild province characterised by the colonial government, was to an extent a product of its revenue policy. In the pre-colonial period, the Ahom kings managed only wet-rice land and the peasantry had revenue-free access to the land beyond. Peasants cleared their surrounding thickets to keep the wild animals off. However, the colonial government understood such

[143] Arupjyoti Saikia, "State, Peasants and Land Reclamation: The Predicament of Forest Conservation in Assam, 1850s-1980s," *The Indian Economic and Social History Review*, 2008: 93-96.

[144] Milroy, *Note on Game Preservation in Assam*, 4.

[145] Dinerstein, *The Return of the Unicornis*, 14.

[146] Butler, *A Sketch of Assam*, 29; James Willcocks, *The Romance of Soldiering and Sports* (London: Cassel and Company, 1925), 28, 40.

[147] M'Cosh, *Topography of Assam*, 47.

[148] Cooper, *The Mishmee Hills*, 64.

clearings as an evidence of agriculture and demanded revenue. Forced to pay the revenue, peasants in many places stopped clearing such land near their villages where wild animals took shelter.

The prerequisite to the idea of 'improvement' in Assam was to push back the forces of nature. In converting the Assam's jungles into tea gardens, planters indiscriminately destroyed mega-fauna. The forest conservation from the 1860s made several thousand sq. km of RFs useless for grass-eating herbivores. However, more importantly, colonial improvement practices of tea and forestry created new conditions for the peasants' survival. Ever-increasing land revenue demands further compounded their problems. Peasants had to grow cash crops like mustard and pulses to pay their revenue in cash. From the 1860s, tea gardens and RFs pushed the cultivators to reclaim the thickets and grasslands inhabited by wild animals. Carving out a space free from the threat of wildlife was peasant's everyday concern. As the century ended, colonial rule successfully converted their tolerance and ambivalence towards wildlife—especially the carnivores—to outright hostility. The induced attitude of enmity is vital to understand how the peasants reacted to wildlife conservation initiatives in the twentieth century.

Despite significant inroads made by tea, forestry, and agriculture, nineteenth-century Brahmaputra Valley still left some room for the mega-fauna. Colonial government and peasants both were reluctant to extend cultivation up to the foothills for fear of hill tribes' raids. Although wildlife vanished from the alluvial belt, the foothills provided them with a room. Mega-fauna's foraging habits and ability to defend themselves against hunters and agricultural pressure played a decisive role in their survival. Agriculture did not penetrate fully into the floodplains until the 1930s. These served as another vital refuge for wildlife like rhinos and water buffalos that prefer swamps and marshes. As much as colonialism intensified certain crops and land use, it also introduced new players like the graziers in the

floodplains. The floodplains were also home to some of the last remaining rhinos in the valley, which the colonial government sought to protect in the twentieth century. The following chapters will discuss how the floodplains would become the theatre of conflict between wildlife conservation, livestock grazing, and cultivation.

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Chapter 2: Birth of a Rhino 'Asylum' (1902-1947)

> The question of Game Preservation in India is one that may appeal, in my judgment, not merely to the sportsmen, but also to the naturalist and the friend of animal life. It is certainly not through the spectacles of the sportsman only that I would regard it, though I yield to no one in my recognition of the manly attractions of shikar (game).
>
> I do, however, attach great value to the consideration that wild animal life should not be unduly fostered at the expense of the occupations or the crops of the people. Where depredations are committed upon crops, or upon flocks and herds, the cultivator cannot be denied, within reasonable limits, the means of self-protection. Similarly, it is very important that any restrictions that are placed upon the destruction of game should not be worked in a manner that may be oppressive or harassing to his interests.[1]
>
> George Nathaniel Curzon, Viceroy of India (1899-1905)

Introduction

In the European notion, if Europe was a metropolis, the colonies were rural countryside.[2] European colonial expansion transformed the tropics to fulfil the needs and desires that temperate Europe could not provide.[3] The nineteenth-century colonialists focussed on the natural vegetation (forestry), control over labour (indentured labour), and management of diseases (sanatorium) in the colonies. As the century drew to an end, British naturalists, hunters, and colonial officers turned to the faunal diversity in their colonies. The display of natural history specimens in the museums and exhibitions in England enhanced the glory of

[1] George Nathaniel Curzon, "Game Preservation: Burma Game Preservation Association, Rangoon," in *Lord Curzon in India*, ed. Thomas Raleigh (London: Macmillan & Co., 1906), 435-438.

[2] Mandala, *Shooting a Tiger*, 32.

[3] David Arnold, *The Problem of Nature: Environment, Culture and European Expansion* (Oxford: Blackwell Publishers, 1996), 162.

the British Empire.[4] The Society for Preservation of Wild Fauna in the Empire (SPFE), established in 1903 in London, represented the increasing unease among the erstwhile hunters about the depleting fauna in the colonies.[5] At the start of the twentieth century, the British colonial government was adding a new element to its idea of 'improvement'— wildlife preservation—in its colonies.[6] This chapter outlines the complexities involved in preserving the rhino in British India's frontier province of Assam.

Wildlife preservation initiatives faced challenges from the Empire's own priorities. The colonial government exterminated 'vermin' (wild carnivores like tiger and leopard) to protect human life and facilitate agrarian expansion well into the 1920s.[7] For many hunters—colonial and native—the rhino made more sense when dead than alive, given the value attached to its hunting, meat, horn, and hide. "The viceroys seemed to be chosen as much for their distinction in the field (hunting) as for their political reputation or aristocratic pretensions. Ripon, Dufferin, Curzon, Minto, Irwin, Willingdon and Linlithgow were all well-known figures in the hunting and shooting world and embraced the opportunities presented to them in India with real enthusiasm."[8] Despite Curzon's likings for wildlife preservation, he unambiguously prioritised expansion of cultivation (see epigraph). Undoubtedly, fauna preservation had to carve out its space amidst lopsided emphasis on cultivation.

[4] MacKenzie, *The Empire of Nature*, 37.

[5] In 1900, Game Preservation Conference was held in London emphasising the rapid extinction of big games in the African colonies. MacKenzie, *The Empire of Nature*, 207.

[6] 'Improvement' refers to the imperial idea of asserting control over new territory, specifically the land, with the logic that it will do good to the colonised and colonisers both. Drayton, *Nature's Government*. While the idea is more about applying plant sciences to produce cash crops like tea, sugar, and coffee, it resonates strongly with the preservation of extinct species like the rhino.

[7] Rangarajan, *Nature and Nation*, 81.

[8] MacKenzie, *The Empire of Nature*, 171.

The floodplains and foothills selected as 'asylum' for rhinos are of vital importance here. Besides hosting some charismatic fauna like rhino, floodplains and foothills played two other crucial roles. First, the Brahmaputra floodplains served as the frontier of agricultural expansion in the valley from the late nineteenth century.[9] Secondly, as discussed in the introduction chapter, these peripheral areas formed the constitutive other of the settled agrarian core. In other words, they absorbed the settled villages' troubles—mobile livestock herds, wildlife, and shifting cultivation, amongst others. The sites mulled for rhino preservation already had interests like livestock grazing, shifting cultivation, hunting, thatch collection, and fishing. The annually flooded areas were never the choice of the tea planters. However, the planters did not mind only their bushes. Their interest and control over Assam's environments spilt beyond their estates. Tea estates not only re-ordered Assam's agrarian landscape,[10] the planters were a formidable force in the province's political and social life.[11] After the government's initiative to preserve rhinos, the planters emerged as the most vocal advocates of wildlife preservation and sports hunting in the province.

The human interests in the floodplains formed only part of the complexities around rhino preservation. The Brahmaputra's braided river courses continuously reinvented the floodplains.[12] The wild animals constantly moved around to the new habitats created by river's erosion and aggradation. The government was far from drawing grid-like demarcations on the floodplains, something they mastered in the settled villages and towns.

[9] Edwards, *Land Revenue Settlement of the Nowgong District*, 4; Hart, *Land Revenue Settlement of the Sibsagar District*, 5; Government of Assam, *RAPA 1892-93*, 2.

[10] During 1890-1950, tea estates occupied anything between 7 to 9 per cent of total arable land in Assam (the present boundaries of the state are considered that excludes Sylhet, now in Bangladesh). J. F. Richards, and J. Hagen, "A Century of Rural Expansion in Assam, 1870-1970," *Itinerario* 11, no. 1 (1987), 194.

[11] Amalendu Guha's *Planter Raj to Swaraj*, aptly captures the planter's preponderance in colonial Assam's political life. Amalendu Guha, *Planter Raj to Swaraj: Freedom Struggle & Electoral Politics in Assam 1826-1947* (New Delhi: Tulika Books, 2014); Also see Sharma, *Empire's Garden*; for how the planters led a life of impunity despite their violence against Indians, see Elizabeth Kolsky, *Colonial Justice in British India: White Violence and the Rule of Law* (New Delhi: Cambridge University Press, 2010), 17.

[12] Saikia, *The Unquiet River*, chapter "The River and Its Floodplain Environment".

The cultivators, graziers, fishers, and animals took advantage of the braided river and fluid floodplains and frustrated the efforts to maintain a fixed reserve boundary. Floodplains were set to test the British imperialism's hallmark—command over nature.[13] The KNP's history is enmeshed with these ecological fluidities and transgressions by humans and non-humans.

This chapter discusses the complexities around making room for the nearly extinct rhino. How the nascent idea of wildlife preservation carved out its place in a milieu with an overarching emphasis on agrarian expansion? How the creation of a Game Reserve redefined the agro-ecological world around it? What were the outcomes of the colonial government's attempt to maintain distinct zones of order in the transient floodplains? This chapter shows that the novel idea of rhino preservation gained strength by reinforcing the colonial bias against shifting cultivation and grazing.

Birth of an 'asylum'

At the turn of the twentieth century, there was growing recognition of the rapid depletion of rhino in Assam, especially among the forest officials. The annual forest reports during 1900–1902 mulled if an area can be set aside to protect the rhino.[14] However, financial commitment for solely natural history—with no promise of earning—was out of the question. In 1899, the Bengal Forest Department banned killing rhino in the RFs of Jalpaiguri and Darjeeling Districts.[15] It was the first known ban on killing the rhino in the RFs in India. The initial thrust for rhino preservation in Assam emerged out of the imperial desire to showcase the

[13] For a discussion on natural history as a vehicle for colonial command over nature, see Mackenzie, *The Empire of Nature*, 36.

[14] C. G. Dingwall-Fordyce, *PRFA 1900-1901* (Shillong: ASPO, 1901), 10; E. S. Carr, *PRFA 1902-1903* (Shillong: ASPO, 1903), 7.

[15] A. E. Wild, *Progress Report of Forest Administration in the Lower Provinces of Bengal for the Year 1899-1900* (Calcutta: Bengal Secretariat Press, 1900), 35.

splendour of the British Empire's natural history.[16] Curzon instructed the Zoological Garden, Calcutta, to make its "collections as representative of the varied and interesting fauna of the British India".[17] In July 1902, the Secretary of the Zoological Garden wrote to Chief Commissioner of Assam to supply a rhinoceros against a sum of Rs. 500–1000, the then price of rhino in Calcutta. Curzon toured Assam and Burma in November-December 1901. The Burma Game Preservation Association, a group of European hunters, pressed for his attention towards the depleting game. Curzon was aware that "tigers are undoubtedly diminishing" and "the rhinoceros is all but extinct save in Assam." He believed in the inevitability of the "progress of civilization" to deplete wildlife. Nevertheless, he saw hope in saving them through restriction on firearms and hunting.[18] Curzon's response (in epigraph) to the hunters reflected both the hunter and naturalist in him.

The hunter in Curzon could hardly deter him from the larger goal of 'improvement' of a frontier province like Assam through expansion of tea, forestry, and agriculture. Despite his pretensions of a hunter-sportsman, Curzon was explicit in prioritising cultivation over game preservation.[19] Government of Assam's financial shakiness best explains Curzon's priorities. At the turn of the century, its expenditure exceeded all the sources of revenue.[20] Land revenue that formed almost two-thirds of Assam's total revenue diminished due to the *Kala-*

[16] Various writings and oral history credit Lady Curzon to establish the Kaziranga Game Reserve. According to this version, Lady Curzon reportedly pressed upon her husband Lord Curzon to preserve the extinct rhino. See Gokhale and Kashyap, *Kaziranga*, 9-15. This version is so popular that even academic works reproduce it unquestioningly. See Singh, "Hunting to Conservation," 12. Some scholars dismiss Lady Curzon's role in the absence of any material evidence. See Divyabhanusinh et al., *The Story of India's Unicorns*; Saikia, "The Kaziranga National Park"; Kees Rookmaaker, "Lady Curzon and the establishment of Kaziranga National Park," *Pachyderm*, 2019: 110-111.

[17] From the Secretary, Zoological Garden, Calcutta to the Chief Commissioner of Assam, 16 July 1902, file no. 86, 1902, Assam Commissioner's Office (henceforth ACO), ASA.

[18] Curzon, "Game Preservation," 435-38.

[19] Curzon, "Game Preservation," 435-38.

[20] In 1901-02, Government of Assam's total revenue receipt stood at Rs. 1,50,25,075 against the expenditure of Rs. 1,97,31,011. Government of Assam, *RAPA 1901-02*, 133-136.

azar epidemic and fall in rice prices.[21] Government of India's introduction of fiscal decentralisation meant that the provinces had to be financially self-reliant.[22] Budding interests in natural history were set to compete against agricultural expansion and revenue generation.

Host of political arrangements within British India could not have favoured an all-India wildlife preservation law.[23] Curzon favoured a "permissive and elastic" law and suggested provinces should adopt its provisions "in so far only as they were adapted to the local conditions."[24] In 1903, the Government of India circulated a draft Bill to the provinces. In 1912, it enacted the Wild Birds and Animals Protection Act. The Act prohibited unauthorised capture or hunting of wild animals during closed seasons. Sections 2 and 3 of the Act delegated the responsibility of declaring closed seasons and framing rules to the provinces. While nothing much happened during 1903–1912, the Government of Assam geared towards making room for the extinct rhino.

J. C. Arbuthnot, the officiating commissioner of Assam Valley, was alive to the rapidly declining rhinos. Arbuthnot's response to the zoological garden's letter alluded to the revenue potential of rhino preservation.[25] A law banning rhino killing was not in sight. Bampfylde Fuller, the Chief Commissioner of Assam, considered "establishing an asylum for the rhinoceros." Like his boss Curzon, Fuller was firm that in no way the selection of such tracts should "prejudice the development of cultivation".[26] Arbuthnot identified Kaziranga (229 sq. km) and Laokhowa (104 sq. km) as the rhino bearing tracts in Brahmaputra's south

[21] Government of Assam, *RAPA 1901-02*, 82.

[22] David Ludden, "Spatial Inequity and National Territory: Remapping 1905 in Bengal and Assam," *Modern Asian Studies*, 2011: 16.

[23] Mackenzie, *Empire and Nature*, 284.

[24] Curzon, "Game Preservation," 435-38.

[25] From J. C. Arbuthnot to the Secretary to the Chief Commissioner, 4 November 1902, no. 75, September 1905, Revenue–A, ASP.

[26] From Secretary to the Chief Commissioner to J. C. Arbuthnot, 18 December 1902, September 1905, Revenue–A, ASP.

bank that were "uncultivated and uncultivable waste, destitute of inhabitants."[27] Similarly, revenue officials selected a tract in Kamrup in the foothills of Bhutan to be reserved as North Kamrup Game Reserve. In the next few years, there were careful efforts to exclude any cultivated or cultivable areas from the proposed Game Reserves.[28] Even E. S. Carr, the Conservator of Forests—usually in an adverse position with the revenue officials—strongly supported this view.[29] The conservator's position is explicable. He wanted undisputed authority over the territory coming in his jurisdiction.

The letter from the zoological garden also prompted a discussion on game preservation in the RFs. Fuller wrote to Carr that the laws related to game preservation in the RFs were "dead letters".[30] In response, Carr proposed a new set of hunting rules in the RFs based on procurement of shooting licenses.[31] The rules prohibited hunting a rhino accompanying a calf (the only sure way to identify a female) in all seasons. Only male rhinoceros could be shot. On the contrary, shooting carnivores like tiger and leopard required no fee, a characteristic of colonial vermin extermination policy. The hunting rules as such did not categorise the eligibility to procure licenses on racial lines. However, the high fees one needed to pay ensured that peasants and most natives could not afford it. The new hunting rules were careful not to supersede the interest of cultivation.[32] Even as the RFs could

[27] From J. C. Arbuthnot to the Secretary to the Chief Commissioner, 28 August 1903, no. 77, September 1905, Revenue–A, ASP.

[28] From DC, Kamrup to Commissioner, AVD, 31 May 1904 and DC, Sibsagar to Commissioner, AVD, 4 June 1904, nos. 82-85, September 1905, Revenue–A, ASP.

[29] From E. S. Carr to the Secretary to the Chief Commissioner, 20 September 1904, no. 90, September 1905, Revenue–A, ASP.

[30] From the Secretary to the Chief Commissioner to CF, 15 March 1904, no. 80, September 1905, Revenue–A, ASP.

[31] For shooting first rhinoceros, buffalo and mithun, one had to pay Rs. 50, 20 and 5, respectively. From the second animal onward, the rates were Rs. 100, 20 and 10, respectively. From E. S. Carr to the Secretary to Chief Commissioner, 20 September 1904, nos. 90-91, September 1905, Revenue–A, ASP.

[32] The local government could reduce the rates if any of these animals became "plentiful or causes injury to any crops in the vicinity of the reserve." Government of Assam's notification no. 1051R, 16 March 1905, September 1905, Revenue–A, ASP.

entertain authorised hunting, the new rules banned cultivation, hunting, trapping, and fishing inside a Game Reserve. The Chief Commissioner wanted that Game Reserve in Kaziranga should have no cultivators. He cautioned, "if we once admit habitations, temporary or permanent, within its borders, difficulties will certainly occur."[33] The colonial government wanted well-ordered and non-overlapping zones of cultivation and wilderness.

It is helpful to revisit the nineteenth-century Kaziranga environs where the government proposed to create Kaziranga Game Reserve. In the 1850s, the low-lying locality stood at the eastern end of the Nowgong district. Four land revenue circles—Bhogduwar, Kazeerunga, Namdyung and Rangaloogoor—housed nearly 3,750 people in 19 villages, mostly of Ahom and Chutiya descent.[34] They cultivated nearly 2,500 acres of land, insignificant as compared to the other parts of the district. Additionally, 350 Mishings of a Meerigong (Miri Village) paid house tax.[35] The Mikir (Karbi) Hills in the south was even more sparsely populated. From the 1870s, the foothills south of the Trunk Road gradually came under the tea estates.[36] After the district delimitation in 1867, the area was divided into two districts, Nowgong and Sibsagar. Despite these changes, the locality stood at the farthest end from the administrative centres of either district with a poor official outreach.[37] For the European planters and officers, the low-lying locality with buffalo, rhino, and tiger were happy hunting grounds.[38] Although the natives did not own firearms, there were noted

[33] From Secretary to the Chief Commissioner to CF, 22 December 1904, no. 93, September 1905, Revenue–A, ASP.

[34] Mills, *Report on the Province of Assam*, 485.

[35] Mishing oral history suggests that during the Burmese invasion (1820s,) twelve families fled present-day Dhemaji area and settled in various parts of today's Sonitpur and Biswanath districts in the north bank of the Brahmaputra. Some of these families crossed the Brahmaputra and settled on its bank in the north of where the Kaziranga Game Reserve was established. See Sishu Ram Pegu, *Mor Jivan Drishti: An Autobiography* (Guwahati: Angik Prakashan, 2004), 4-6.

[36] Two steamer heads at Dhansirimukh and Silghat connected the tea gardens with other towns in the Valley and Calcutta.

[37] "Petition of V Narayan Swami", nos. 59-83, June 1890, Revenue & Agricultural, ASP.

[38] Pollok, *Fifty Years' of Reminisces of India*, 195; Willcocks, *The Romance of Soldiering and Sport*, 39-41.

hunters among them too.[39] The locality hardly matched the 'colonial agrarian',[40] but it was not one without any prospect of cultivation, let alone a *terra nullius*.

Revenue officials wrote off the locality—with sparse population and dispersed cultivation—as 'unimportant' backwaters.[41] Come the twentieth century, the Kaziranga environs were slowly recovering from the desertions and decline in the population of the 1890s.[42] However, it was still sparsely populated with 17 persons per sq. km (Table 2.1). The tea gardens in the eastern portion under the Sibsagar district had brought many workers from central India to give the locality a semblance of an inhabited place. In contrast, the western portion under the Nowgong district (Duarbagori *mauza*) still wore a desolate look. All along the Trunk Road, there were several permanent villages of the Assamese (Ahoms and Chutiyas), Karbis, and Muslims. Mishing villages dotted the bank of the Brahmaputra.[43] Around the turn of the century, the Nepali graziers interspersed the Mishing villages. Regardless the kind of settlement, villagers grew paddy, mustard, and pulses in the low-lying land. In the Nowgong portion of the locality, the peasants were indebted to the omnipresent Marwari traders—a sign that life was not easy for all. The population decline in the Nowgong district also reduced its livestock. However, in the 1900s, Kaziranga's floodplains promised rich pastures to rear cows and buffalos and supply dairy products and draft animals.[44]

[39] See a biography of 'Nigona Shikari' in Bubul Sharma and Swapan Nath, *Kazirangar Borenya: Pratham Khanda* [The Venerables of Kaziranga] (Kaziranga, 2015), 11.

[40] Bhattacharya, *The Great Agrarian Conquest*.

[41] J. McSwimey, *Assessment Report of the North-eastern Group (Nowgong District)* (Dacca: The Gandaria Press, 1908); *Kala-azar* epidemic (1891–1900) ravaged the Nowgong district, and depopulated it by one-fourth.

[42] Excluding the tea garden population, there was a decline in the villages, as shown in the Table 2.1.

[43] A Survey of India map of 1890 showed several Miri (Mishing) villages along the Brahmaputra. *David Rumsey Map Collection*, https://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~328919~90097404.

[44] Debeswar Saikia, *Kazirangar Buniyad* (Kaziranga: Chidananda Saikia, 1998), 5-6.

Table 2.1: Population in the *Mauzas* where the Kaziranga Game Reserve was proposed, 1891-1901[45]

District	*Mauza*	Area (sq. km)	Total Population (1891)	Total Population (1901)	Tea Garden Population (1901)	*Mauza* Density (1901)	District Density (1901)
Nowgong	Duarbagori	530	1,967	2,483	732	4	30
Sibsagar	Namdayang	562	9,762	13,135	6,499	23	47
	Duarbagori	-	2,838	2,676	-	-	-
Total		1,093	14,567	18,294	7,231	17	40

The locality was undergoing rapid agrarian changes as the government prepared to carve out the Game Reserve.[46] The Kaziranga Game Reserve was proposed between the Mora-diphalu River in the south and Diphalu River in the north. This excluded the permanent villages south of the Mora-diphalu (along the Trunk Road), and Mishing and Nepali villages north of the Diphalu upto the Brahmaputra.[47] The proposed reserve—presumably without human habitation—still surprised A. W. Botham, the forest settlement officer (FSO) appointed to settle the rights and claims. Botham noted, "while the reserve was planned, it was apparently thought that there were no villages within the proposed boundaries." In 1908, in the Nowgong portion of the proposed reserve, he found two villages with 47 families residing since 2–3 years and cultivating 230 acres on annual lease.[48] A mix of Assamese lower caste groups like Keot and Koch, Kalitas, Nepalis and Bengalis tried to eke out a living through shifting cultivation, grazing, and fishing in the low-lying areas. While Botham

[45] B. C. Allen, *Census of India, 1901. Volume IV-A, Assam, Part II, Tables* (Shillong, ASPO, 1902), 282-284.

[46] In the core areas of the Sibsagar district, the limits of agricultural expansion were exhausted by the end of the nineteenth century. Thus peasants started moving out to the peripheries of the district that includes Kaziranga. Hart, *Land Revenue Settlement of the Sibsagar District*, 13-14.

[47] All discussions on the original settlement of the Kaziranga Game Reserve follows from "Reservation of the Kaziranga and Rangalugarh Forest in the Sibsagar and Nowgong districts, respectively", nos. 3-10, January 1908, Financial Department, Forests–A, Eastern Bengal and Assam Secretariat Proceedings (henceforth EBAP).

[48] Uparteliagaon (27 *ryots*, 149 acres) was there for eight years and Dopaduargaon (20 *ryots*, 81 acres) shifted 2-3 years ago.

ordered the families to relocate, he wanted them to take up more settled forms of cultivation elsewhere.[49] There is no record available to suggest where these families relocated to.

The proposed reserve excluded the permanent villages inhabited by Assamese, Muslims, Bengalis, and Karbis in its south. These stood all along the east-west Assam Trunk Road and up to the Mora-diphalu River in the north (reserve's southern boundary). However, eight village headmen stood before Botham, and objected to the ban on grazing, fishing, and collecting thatch, bamboo, and cane from the reserve. However, it can be inferred that peasants' objection had more to do with the Game Reserve impeding the prospects of cultivation.[50] Botham disallowed all the claims saying, "they have no legal rights" although "they have enjoyed these advantages in the past." Moreover, he felt that these resources were in abundant supply outside the reserve too—a typical colonial view of an abundant agrarian frontier in Assam. However, in the Sibsagar district portion, Botham allowed villagers' access to the Mora-diphalu (southern boundary) "to ensure reasonable supply of fish". In the Nowgong portion, the river was already inside the proposed reserve, and Botham did not change it.

The settlement process did not have any appreciation or even mention of the rhino. On 3 January 1908, the Government of Assam formally established Kaziranga Game Reserve in 229 sq. km.[51] Carving out a Game Reserve in Kaziranga (and simultaneously in Laokhowa and North Kamrup) brought several firsts in the province. For the first time, Game Reserves completely closed to all human resource gathering or reliance were set up. In principle,

[49] If the government did not renew the annual lease, peasants' rights were extinguished. Botham proposed a "liberal compensation" of Rs. 25 for holding bigger than 7 acres and Rs. 15 for smaller.

[50] On the Nowgong portion of the proposed reserve, there were 25 acres under shifting cultivation—as precursor to more settled pattern of cultivation.

[51] See Gazette notification no. 37F, 3 January 1908, Government of Eastern Bengal and Assam.

complete closure made them stricter than the already unpopular RFs.[52] The floodplains attracted neither the tea estates nor the forestry operation. These were largely under shifting cultivation, grazing, and fishing—none of which involved extensive form of government penetration. Government also auctioned the *simul* (*Bombax Ceiba*), thatch, and cane to private leaseholders, but hardly ventured directly into the floodplains. The Kaziranga Game Reserve was another first in which the government ventured to manage the floodplain directly.[53]

Summing up the discussion so far, creating Game Reserve proved more complex than the officials assumed. Several agrarian claims in a seemingly *terra incognita* surprised Botham. As per Curzon and Fuller's desire, he took every caution not to harm the prospects of cultivation. However, he disallowed all other usufruct rights. Botham invoked the legal rights over natural resources rather than scientific arguments to preserve the nature. The colonial government saw all agrarian usage except cultivation as a 'privilege' rather than right. Unless the government notified a stretch as RF or Un-classed State Forest (USF)[54], it did not record rights beyond the cultivated plots. However, peasants settled in such peripheries—with abundant uncultivated lands beyond what they cultivated—keeping in mind their future requirements.[55] The Game Reserve was bound to irritate such prospects for the peasants.

[52] On RFs, see Saikia, *Forests and Ecological History of Assam*, 78, 315.

[53] Other modes governing the floodplains were indirect. For instance, *mauzadars* collected grazing taxes.

[54] It is a category of land under the revenue administration created through the Assam Forest Regulations 1891. Usually possessing low-quality trees, these lands could be either declared as RF or diverted to cultivation. The rights of procuring forest produce from such land were codified.

[55] Throughout the colonial period in Assam, peasant cultivation expanded by recording their rights in the land they cultivated.

Fencing the 'asylum'

Game Reserve's attendant irritations did not deter the coming of new villages in its neighbourhood. Around the turn of the twentieth century, peasants from the densely settled parts of the Sibsagar district rapidly reclaimed land in its north-western periphery that included the Kaziranga environs.[56] During 1901–1921, the population in the Kaziranga environs grew more rapidly than elsewhere in the district.[57] Assamese households from more settled parts of the district[58] and the time-expired workers (Adivasis) from the neighbouring tea gardens set up new villages in the Game Reserve's south.[59] Since the establishment of the Game Reserve in 1908, the Brahmaputra shifted its course towards the north bank. Now the Kaziranga environs were less prone to annual floods. It helped in settling down the cultivators.[60] Pastures in the locality were a key attraction to the cultivators as well.[61]

Tea estates considerably foreclosed the peasant's prospects of expanding villages in the Kaziranga environs. During 1890–1950, tea occupied 7–9 per cent of the total arable land in the Brahmaputra Valley.[62] Growth in tea acreage somewhat halted in the twentieth century as compared to the nineteenth. Even then, during 1910–1930, planters added 280 sq. km. By

[56] Hart, *Land Revenue Settlement of the Sibsagar District*, 13-14.

[57] The population of the north-western Golaghat group (a land settlement administrative unit comprising several *mauza*s, of which Namdoyang was one) grew by of 74 per cent. In contrast, the population of the district grew by 38 per cent. C. K. Rhodes, *Report on the land Revenue Settlement of the Sibsagar District during the years 1923 to 1929* (Shillong: AGP, 1929), 20. In 1920, Namdoyang was further divided into Bokakhat and Kaziranga *mauzas*.

[58] Debeswar Saikia, a resident of Kaziranga, recollects that, around 1910, his father relocated from Naharjan (south-east of Kaziranga) to Kaziranga. See Saikia, *Kazirangar Buniyad*, 3.

[59] During 1921-1924, six new villages settled along the Mora-diphalu. Sub-deputy Collector (SDC), Kamargaon Circle to Sub-divisional Officer (SDO), Golaghat, 23 December 1924, file no. X-33, 1925, Revenue, ASA; Adivasis in Assam refers to the descendants of the central Indian tribes and other groups. They were brought as indentured labourers to work in the tea estates, and another group was resettled by the colonial government in the western Assam.

[60] "Extracts from the proceedings of the Governor in Council in the Revenue Department", no. 2891R dated 25 October 1926, file no. I-62, 1926, Revenue, ASA.

[61] "It was not difficult to own a few heads of buffalos." Saikia, *Kazirangar Buniyad*, 5-6.

[62] Richards and Hagen, "A Century of Rural Expansion in Assam", 194.

the 1900s, several tea gardens ringed the foothills (immune to flood) in the Game Reserve's south.[63] Simultaneous to the Game Reserve's establishment, tea planters aggressively enlarged their holdings.[64] In the next few decades, planters further expanded their holdings despite peasants' protest and official restrictions.[65] In monsoon, the graziers shifted their livestock from the low-lying floodplain to the foothills in the south where tea gardens were located.[66] Expansion of tea estates continually reduced such possibilities for the graziers.

Botham's settlement report does not say anything about the tea planters' reaction to the demarcation of Game Reserve's boundaries. In the Nowgong portion of the reserve, the Trunk Road was reserve's southern boundary. The Mora-Diphalu River came within the reserve. The villagers and tea garden workers had no legal access to it now. The planters pressurised the government to exclude the area between the Trunk Road and Mora-Diphalu so that the workers had access to it.[67] In 1911, the government excluded a stretch of 5.83 sq. km along the southern boundary of the Game Reserve (marked D on Figure 2.2).[68] This

[63] Tea gardens near the Game Reserve and their respective acreage until 1910 in parenthesis: Diflu, Deering, Halwa and Lotabari (908); Hatikhuli (624); Borsapori (600); Bokakhat (300); Naharjan (610) and Kuthori (300). Anonymus, *Taylor's Map of the Following Tea Districts: Darjeeling, Terai, Jalpaiguri and Dooars, Darrang, Golaghat, Jorhat Nowgong, Sibsagar, Lakhimpur, Dibrugarh, Cachar, Sylhet with Complete Index to all Tea Gardens* (Calcutta: Thacker, Spink & Co., 1910), plate IV-V. The actual holdings were often more than three times the acreage.

[64] In 1908, the Kuthori Tea Grant was allotted 300 acres to its existing 700 acres. The Kuthori villagers opposed this grant because it was their pasture, Group III, Collection 2, file no. 27, 1908, Board of Revenue (Eastern Bengal and Assam), ASA.

[65] Amidst rising fear of unavailability of land for cultivation, the DC, Sibsagar prohibited land acquisition by tea estates in the Kaziranga environ. Despite this, Hatikhuli Tea Estate added 145 acres to its 1,437 acres in the Mikir Hills portion of the above tract. See DC, Sibsagar's order, 4 September 1929, and Assistant Secretary to the Commissioner, AVD, 23 September 1929, file no. II-48, 1929, Revenue, ASA.

[66] A more recent reference is found in a petition (undated, most likely March 1952) of the Golaghat Grazier Association to the Revenue Minister, Assam, file no. RSG-181, 1951, Revenue-Settlement (Grazing), ASA.

[67] H. Carter, *Progress Report of Forest Administration in the Province of Eastern Bengal and Assam, Eastern Circle, for the year 1910-1911* (Shillong: EBASPO, 1912), 1.

[68] The government noted that the disforestation was to "allow the Kuthuri villagers free access to the Mora-diflu river, as this is the only source of water supply in the locality, and to allow the villagers to continue to graze their cattle and cultivate mustard and other crops." Further, the area "does not appear to be specially favoured by rhinoceros or any type of game." Gazette notification no. 2069F, 18 April 1911, Government of Eastern Bengal & Assam.

disforestation made the Mora-diphalu (the southern boundary) open to all villages. Though the decision was intended to suit the planters' interest, the stream was now open to the village women to fetch water, wash clothes, and catch fish. The move was only the beginning of a far intense and often divergent interest of the planters in the Game Reserve and wildlife for a decade or so.

Some European military officials and planters in Assam were keen hunters.[69] The hunting ban in the Game Reserve applied to the Europeans and natives alike. Outside the reserve, the native cultivator and hunter posed a direct challenge to the Europeans' luck of game. As the rhino grew dearer for the Europeans, an occasional trophy—outside the reserve—fetched them glowing appreciation.[70] Such growing scarcity of game turned some of them into its strong preservation advocates.[71] In 1909, a planter wrote in *Forest and Stream*, "with exception for game in these sanctuaries, which are reserved for rhinoceros breeding, almost everything in the province is indiscriminately slaughtered."[72] He launched a derisive attack on the Nepali graziers as the destroyers of the rhino and tiger. He added, "more harm has been done by these Nepali exterminators within last eight years than has been done by the shikar since Tea was first started." He warned, "unless government keeps these outlaws within certain bounds there will not be a head of big game left in Assam in a short time." As the game grew scarce in the colonies, it was typical of the Europeans to

[69] For military officials' hunting account, see Pollok, *Fifty Years' of Reminisces of India*, 195; Willcocks, *The Romance of Soldiering and Sport*, 39-41; for planters' hunting account, see Barker, *A Tea Planter's Life in Assam*, 212; A. R. Ramsden, *Assam Planter: Tea Planting and Hunting in the Assam Jungle* (Guwahati: United Publishers, 2016, First Published in 1948); Frank Nicholls, *Assam Shikari: A Tea Planter's Story of Hunting and High Adventure in the Jungles of North East India* (Auckland: Tonson Publishing House, 1970).

[70] In 1909, T. Briscoe, a planter from Tezpur killed a rhino of record horn length, presumably in the sanctuary's north. "A Record Rhino", *The Englishman*, 4 May 1909; "Record Rhino Shot", *The Straits Times*, 17 May 1909.

[71] Before this, Assam planters' role in game preservation is unknown, although the Nilgiri planters were active participants in the Nilgiri Game Association that sought the preserve the extinct game population. Mandala, *Shooting a Tiger*, 285-286.

[72] "The Game Preserves of Assam," *Forest and Stream*, 25 December 1909. The author does not disclose itself as a planter, but it is evident.

deplore the peasant hunting as unscientific and reckless.[73] The planters–with their prejudiced vision—became the eyes and ears of a global network of enthusiasts of the game preservation in Assam.[74]

We do not have the peasants' and graziers' views from the period to weigh against the planters' complaints. However, there is evidence to sketch the peasants' outlook towards the rhino. As discussed above, the tract selected for the Game Reserve was surrounded by a dense ring of villages in its south and sparse villages in the north (along the Brahmaputra). Even until the 1930s, colonial officials branded the tract as an impassable "*terra incognita*".[75] However, there is another way to read this observation. Typical of the European disdain and fear for the swamps, these were the last few areas where the white hunters feared going. In contrast, the low-lying tract showed deep footprints of the agrarian community, who had a name for every *beel* in the area. Survival of a few heads of the rhino easily traceable within their small home range suggests that there was a collective belief among the rural folks of all hues that they can live just as the birds and butterflies. It is not to say that they did not kill the rhino for its horn. However, digging a pit and removing the earth required several men. There was also a waiting time to trap the rhino. Even without going into the economics of the rhino horn, it can be surmised that peasants in ordinary times would have focused on expanding their holdings and rearing few heads of cattle and buffalos. Moreover, the rhino as a species does not carry the notoriety of a crop raider, unlike elephants and wild boars. It is unlikely that one who killed a rhino to hack its horn would have had the same esteem as a shikari in

[73] Mandala, *Shooting a Tiger*, 275; For white landowners' racial prejudices against African hunting in South Africa around the same time, see Carruthers, *The Kruger National Park*, 31.

[74] William T. Hornaday, a hunter-turned-naturalist and director of the Bronx Zoo, New York, was one such advocate of rhino preservation, who lent voice to these concerns. William T. Hornaday, *Our Vanishing Wildlife: Its Experimentation and Preservation* (New York: Charles Scribner's Sons, 1913), 189.

[75] A. J. W. Milroy, *PRFA 1934-35* (Shillong: AGP, 1935), 19.

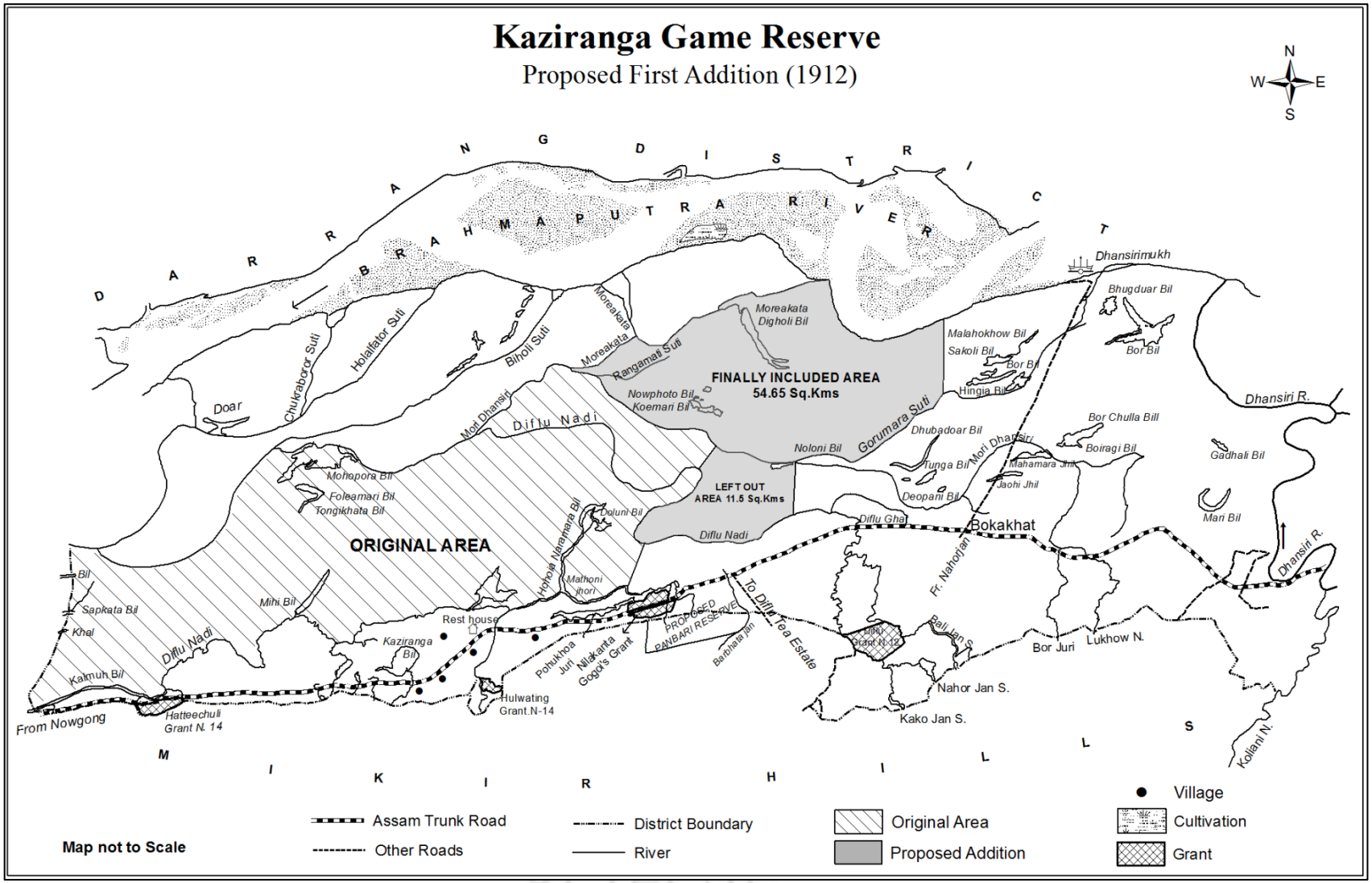

Figure 2.1: Map showing the settlement of the first addition to the Kaziranga Game Reserve, 1912. Source: "Revised Map Showing The Proposed Addition To The Kaziranga Game Reserve Accompanying Settlement Report", ASA. Scale removed while tracing. Illustrations like villages and rest house added based on contemporary sources. Traced by Kiran Sharma.

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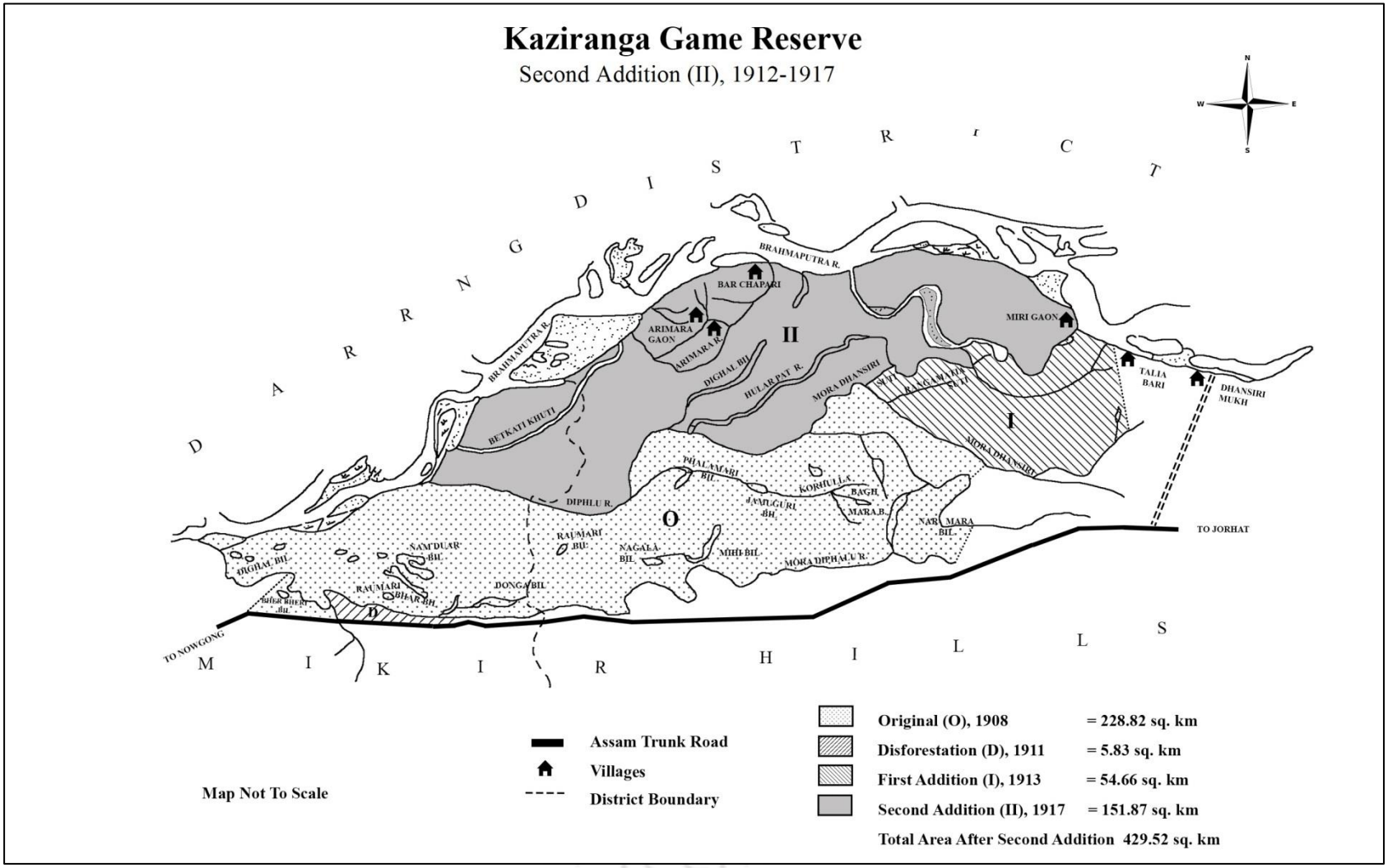

Figure 2.2: Map showing the second addition to the Kaziranga Game Reserve, 1912-17. Source: The map was included a compendium of notifications related to the KNP (1908-1969), downloaded from the old website of the FD which no longer exists. Traced by Ajay Salunkhe.

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forest societies who rescued people and cattle from carnivores and crop-raiding animals.[76] Involvement in rhino killing was at best a low-key affair restricted to only a handful among the peasants and graziers. However, these minutiae of social restraints did not matter to the Europeans who rested their luck (game) on a complete restriction on the native hunting.

The eastern neighbourhood of the reserve was largely under shifting cultivation, and peasants collected thatch, fish, firewood, bamboo, and cane here. Peasants burnt the high grasses annually, and the rhino loved to feed on the new grass. Europeans alleged that rhinos venturing out of the reserve were easy targets of the native hunters.[77] Planters' allegations, garbed in the concern for preservation, were too loud with a global reach for the government to ignore. First government response to such charges resulted in the proposal to expand the reserve in its north-eastern corner.[78] In 1911, the government proposed to add 66.15 sq. km to the Game Reserve (See Figure 2.1).[79] Neighbouring planters and cultivators protested against such expansion. "About one hundred *ryots*" objected before A. Playfair, the FSO, against the restrictions that would follow the inclusion of the area in the reserve. However, Playfair dismissed the objections saying there was still enough land outside the Game Reserve for shifting cultivation and household needs.

Playfair's settlement shows that besides permanent cultivation, game preservation played a deferential role to the plantation capital too. The settlement map (Figure 2.1)—a guide to the evaluation of all the interests involved—marked all the land grants for tea and

[76] There is no legend in Assamese that suggests heroic deeds of killing a rhino.

[77] Oscar Kauffmann, a German traveller and hunter, alleged that the Assamese peasants shot at rhinos coming out of the reserve. Rookmaaker, "Lady Curzon and the establishment of Kaziranga National Park", 2019.

[78] See A. Playfair's "Note on the proposed extension of the Game Reserve near Bokakhat", no. 17D, February 1913, Revenue–A, ASP.

[79] See A. Playfair's "Note on the proposed extension of the Game Reserve near Bokakhat", no. 17D, February 1913, Revenue–A, ASP. All discussion on the first addition is based on this source unless otherwise specified.

forestry, but no villages. The neighbouring planters protested on three grounds.[80] First, expansion of the Game Reserve would shrink their hunting areas. Secondly, they claimed that labourers settled near the reserve would move away, causing labour scarcity in their plantations. Thirdly, the proposed area had waterways to carry tea chests to the steamer heads on the Brahmaputra. Playfair rejected the first two objections. However, he accepted the third objection—the right of passage. Accordingly, he excluded a block of 11.5 sq. km from the proposed inclusion (Figure 2.1). Besides simplifying the Game Reserve's boundary, this exclusion meant, "larger area would remain open to cultivation and a sop would be offered to those objectors who claim that their cultivation is being restricted and facilities for grazing, etc. are being interfered with." However, it was only a spinoff of securing smooth passage to the planters. In 1913, 54.6 sq. km was added to the Game Reserve for the first time after its establishment.

Playfair knew well that "present addition to Kaziranga will not afford absolute immunity to the rhino, for the animal will always wander further afield in search of young grass after the jungle is burnt…" Why was there no call for a complete ban on hunting? For the colonial officials, hunting was a way to come closer to the ordinary Indian subjects.[81] Besides recreation and display of manliness, hunting was a method of colonial rule.[82] In 1909, The Earl of Minto, Viceroy of India, planned a hunting trip to Assam. *Times of India* forewarned, "It would be vastly interesting if someone in the Accounts Department were to work out, when the bills are paid, what this rhinoceros hunt and a buffalo or two will cost the

[80] We do not precisely know the objecting planters, except H. R. Forbes of Naharjan. Playfair noted, "A number of planters submitted a joint protest which was made over to Mr. H. R. Forbes of Nahorjan to deliver to me." Other plantations Playfair mentioned in the neighbourhood were Lotabari, Difloo, Bokakhat and Borsapori. "Managers of some of these contend[ed]" the expansion proposal.

[81] Mackenzie, *The Empire of Nature*, 189-190.

[82] Mandala, *Shooting a Tiger*, 2, 39.

Province per head by the time they are added to His Excellency's game-bag."[83] Despite such criticisms, he shot a rhino in the North Kamrup Game Reserve.[84] Hunting was so embedded within the logic of imperial rule that preservation era could not undo it easily. A complete ban could have also displeased the powerful lobby of planters who still enjoyed shooting outside the reserve.[85] Moreover, a ban on hunting ran against the colonial government's lopsided emphasis on cultivation. Simultaneous and contradictory processes of protection and extermination meant that the extinct rhino had to confine itself within the Game Reserve's boundary to overcome extinction.

While the settlement of the first addition (1911–1913) was underway, planters' advocacy for wildlife protection grew louder.[86] In 1913, several planters wrote to Archdale Earle, the Chief Commissioner of Assam, that any rhino moving out of the Game Reserve fell to the shikari. They proposed extending the Game Reserve to the Bokakhat-Dhansirimukh Road in the east, Trunk Road in the south, and the Brahmaputra in the north. They argued that such extension would ward off two 'threats': contagion to wild animals from livestock and illegal hunting by the natives.[87] The planters' proposal, if realised, would have made the Game Reserve bigger than today's Kaziranga *mauza*. Playfair, the Deputy Commissioner of the district and the FSO again, ruled out any more expansion.[88] This time, the neighbouring planters convinced Playfair that "any curtailment of the area available for their coolies must seriously affect labour force." Besides, he argued that many villagers from permanent villages went to these low lying areas for dry season cultivation.

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[83] "Viceroy's Shooting Tour: A Question of Expense", *Times of India*, 18 February 1909.

[84] A. J. W. Milroy, "The North Kamrup Game Reserve," *Indian Forester* 42 (1916): 452-464.

[85] Playfair noted in his settlement report. Also, see Rookmaaker, "Lady Curzon and the establishment of Kaziranga National Park".

[86] "The Game Laws", *The Times of Assam*, 10 August 1912, quoted in, no. 37, May 1914, Revenue–A, ASP.

[87] From J. Errol Gray to the Chief Commissioner, Assam, undated, April 1913, and F. W. Gore to the Chief Commissioner, Assam, 27 August 1913, no. 42-43, May 1914, Revenue–A, ASP.

[88] Playfair to the Commissioner, AVD, 2 June 1913, no. 46, May 1914, Revenue–A, ASP.

D. Herbert, the Commissioner, Assam Valley Division, did not entirely agree with Playfair. While Herbert agreed with Playfair that the reserve's extension in the east and south would obstruct cultivation, he saw no problem extending it northward up to the Brahmaputra River. Therefore, a stretch of 151.87 sq. km between the Diphalu (reserve's northern boundary) and Brahmaputra River (marked II on Figure 2.2) became the centre of a long-drawn debate. Shifting cultivation and grazing were two key issues in this relatively highland area. However, colonial officials varied in their visualization of the locality, giving contrasting opinions about how best to use the land.

Table 2.2: Table showing the population and livestock in the proposed second addition, 1913[89]

Community	Number of houses	Number of persons	Buffaloes	Cows	Total of Buffalos and Cows
Miri (Mishing)	89	412	388	206	594
Nepali	201	588	3493	1058	4551
Assamese	16	24	12	84	96
Bengalis	2	5	0	2	2
Total	308	1029	3893	1350	5243

While arguing for its inclusion in the Game Reserve, Herbert ascribed an unruly characteristic to the land in question. He suggested that the area had "one Miri village and one Napali [sic] and Hindu village with a total of 42 houses, and there are 13 *pam* cultivators, who cultivate 101 bighas [33 acres] of land."[90] However, Herbert underreported the acreage. While the cultivation was mainly in the winter and spring, his figures were for the rainy season.[91] Herbert also reported that the proposed area had 308 grazing households with 1,029

[89] From D. Herbert, offg. Commissioner, AVD to the Second Secretary to the Chief Commissioner, 10 October 1913, no. 46, May 1914, Revenue–A, ASP.

[90] From D. Herbert, offg. Commissioner, AVD to the Second Secretary to the Chief Commissioner, 10 October 1913, no. 46, May 1914, Revenue–A, ASP.

[91] Herbert's letter of 10 October suggests that information that flowed to him was from August-September. Mustard and *matikalai* sowing was yet to follow, and paddy was sown in the riparian areas in February-march and harvested by June-July.

persons (See Table 2.2). Two-thirds of these households were the Nepalis, and the rest were the Mishings, Assamese, and Bengali. The graziers concentrated in this relatively higher ground during the rainy season when all other sandbars submerged. Herbert's livestock estimation was on a higher side for the year. Thus, in his view, the locality wore an outlook of an unruly pasture. In Herbert's terms, the graziers were "the Nepalese who were not British subjects", "nuisance as grasping and bullying moneylenders", "keen poachers", and hence, "should receive no consideration".[92] Likewise, he found the "nomadic" Mishings irrelevant for consideration and wanted them to go like the Nepalis. The mobile graziers and shifting cultivators were hardly any colonial officials' favourites.[93] However, Herbert's contempt exceeded the general colonial dislike towards these mobile peoples. Herbert was primarily a police officer, and he was temporarily officiating a revenue office. His views reflected the police officer trying to bring 'order' in the frontier province.[94] Despite Herbert's nod to include the area in the Game Reserve, the deliberation went on for over three years that saw contrasting views held by different officials.

Table 2.3: Table showing the landholding (in acre) in the proposed second addition, May 1915[95]

Village	Community	Number of households	Area under annual lease	Area under *Tauzi*	Total
Lotabari Bahoni	Miri (Mishing)	13	39	12	51
Latabari Charigharia	Miri (Mishing)	16	48	43	90
Arimara	Miri (Mishing)	14	41	8	49
Ahom Chapori	Assamese	6	47	0	48
Total		55	175	63	238

[92] Ibid.

[93] Radhika Singha, *A Despotism of Law: Crime and Justice in Colonial India* (Delhi: Oxford University Press).

[94] Herbert wrote the annual police reports between 1914–1919. For instance, see D. Herbert, *Report on the Police Administration in the Province of Assam for the Year 1914* (Shillong: ASPO, 1915).

[95] Prepared from "Proceedings in connection with the proposed addition to the Kaziranga Game Reserve," 29 July 1915, no. 186, September 1917, Revenue–A, ASP.

A contrasting picture of the locality emerged when Playfair visited the locality in early May 1915.[96] He found four villages—three Mishing and one Assamese—cultivating in 238 acres of land, almost seven times the Herbert's figure (See Table 2.3). His visit in early May gave Playfair the most expansive glimpse of acreage, possibly due to the standing paddy crop. However, Playfair reported only 2,277 cows and buffalos, two-fifths of Herbert's count. Playfair's numbers were from the cattle census held in March, the driest month of the year when the Nepali and Mishing graziers dispersed to various low-lying sandbars of the Brahmaputra. He reported that though the shifting cultivators who held the land under annual lease had no established rights over the land, they would suffer if they were to relocate. Moreover, he found no suitable place to relocate nearly 6,000 cattle. Thus, Playfair saw an agrarian mosaic in the locality and ruled out its suitability for wild animals. To be sure, the government did not worry much about relocating the shifting cultivators. But it was the highly complicated question of grazing that dominated the prolonged discussion.

Colonial officials' view of the graziers as 'nomadic' and 'rude' significantly boosted the argument for their removal. However, this characterisation ignored the graziers' hardships to stay afloat amidst changing land use patterns, agrarian conditions, and floodplains volatilities. The expansion of cultivation, tea gardens, and forestry increasingly pushed the graziers to the floodplains.[97] Generally, as the spring progressed, graziers shifted their *bathans* (livestock camps) to the higher grounds to escape the floods. Floods brought them

[96] "Proceedings in connection with the proposed addition to the Kaziranga Game Reserve," 29 July 1915, no. 186, September 1917, Revenue–A, ASP.

[97] We discussed this in chapter 1. In the twentieth century, forest reservation in the foothills made this trend clearer. Two examples in the Kaziranga Game Reserve's neighbourhood were: Panbari RF (created in 1913, see Gazette Notification no. 677R, 22 February 1913, Government of Assam) and Behali and Biswanath RFs (created in 1917-18), see A. W. Blunt, *PRFA 1917-18* (Shillong: ASPO, 1918), 1.

enormous troubles.[98] Worse was when even these highlands submerged, usually for a fortnight or so. Congestion, pests, mosquitoes, and lack of forage and water diseased and killed the buffalos and cattle. Flood often swept away buffalos, or the latter joined a wild herd. However, the annual flood also replenished the floodplains with rich nutrients. After the rains, grasses—*khagari* (*Saccharum spontaneum)* and *ekra (Saccharum ravennae)*—grew abundantly in the submerged areas.[99] When the floods receded by August-September, graziers relocated their *bathan* to a *tapu* (riverine sandbar) with good forage conditions.[100] Such centrality of highlands in floodplain pastoralism made the stretch in question one of the most important pastures in the valley. The proposed area was also vital from the graziers' viewpoint to market their dairy products. From the mid-nineteenth century, areas north of the Game Reserve—lying at the intersection of hill, valley, and floodplains—saw gainful trade and commerce.[101] The graziers in this locality accessed the steamer-heads in Gamiri, Behali, Silghat, and Dhansirimukh to trade their products.[102] This flourishing trade reflected in the Government of Assam's rapidly increasing revenue from grazing.[103]

However, it was the question of maintaining a colonial agrarian order that prolonged the deliberation. Conflict between grazing and cultivation was a burning question in the 1910s. The colonial discourse on material progress linked grazing with the 'primitive'

[98] For a description of the floodplains grazing here, see Desai, *Report of the Special Officer*, 9. For another excellent literary illustration, see Lil Bahadur Kshattry, *Brahmaputra ka Chheu-chhau* [Around the Brahmaputra] (Lalitpur (Nepal): Sajha Prakashan, 2016, First Published in 1986).

[99] See Hart, *Land Revenue Settlement of the Sibsagar District*, 8.

[100] Arbuthnot, *Grazing in Assam*.

[101] I refer to the Chayduar and Naduar areas in the Darrang district here. For a wider discussion on the valley, see Saikia, *The Unquiet River*, 186.

[102] In 1914, Gamiri and Behali steamer heads exported 2,000 maunds yoghurt to Kokilamukh (near Jorhat) and 276 maunds butter to Silchar. Arbuthnot, *Grazing in Assam*, 21-22, 31-32.

[103] Revenue from grazing increased from approximately Rs. 14,000 in 1901 to Rs. 1,83,000 in 1915. Part of it was due to successive increases in grazing taxes aimed to deter the growth of the herds. Dingwall-Fordyce, *PRFA 1900-1901*, 10; W. F. L. Tottenham and A. W. Blunt, *PRFA 1915-1916* (Shillong: ASPO, 1916), 28-31.

lifestyle and inefficient land use in contrast to settled cultivation.[104] Simultaneous to the discussion on Game Reserve expansion, the Government of Assam ordered an enquiry on the conflict between grazing and cultivation in the Assam Valley Districts.[105] W. J. Arbuthnot, the enquiry officer, cautioned that dispersing the graziers from the area risked conflict with cultivation elsewhere. The stability of the settled agricultural belt depended upon not disturbing its constitutive other, the peripheral floodplains. Playfair's reluctance to disperse the graziers from the pasture in question was tied to such vision of the colonial agrarian order.

Based on Playfair's ground report—that cautioned from dispersing the livestock from the area—the top officials decided that "if it was possible to provide for the graziers elsewhere it would be desirable to include the area in question in the Kaziranga Game Reserve."[106] Meanwhile, the planters kept lobbying the Chief Commissioner for extension.[107] On 15 August 1916, at least a dozen concerned officials met in Shillong to decide the matter.[108] The arguments in favour of the inclusion of the area in the Game Reserve were broadly twofold. First, the highland area served as a refuge for the wildlife during a heavy flood. Secondly, presence of the domestic herds in the area threatened the spread of disease to the wild animals. This time, Playfair argued that it was not, "desirable to include the area in sanctuary even if accommodation could be found elsewhere …" He argued that contact

[104] Saberwal, *Pastoral Politics*, 206.

[105] Arbuthnot, *Grazing in Assam*, 32.

[106] See "Memorandum of a conference held at Government House on June the 8th, 1916", no. 191, September 1917, Revenue–A, ASP.

[107] On 27 June 1916, F. W. Gore, a planter from Dibrugarh, met the Chief Commissioner in Shillong in presence of the Conservator of Forests and other senior officials. "Extracts from the copy of memorandum of the proceeding of a meeting held at Government House on June the 27th, 1916", no. 192, September 1917, Revenue–A, ASP.

[108] The attendees included senior secretariat officials; two conservator of forests; deputy commissioners of Nowgong, Sibsagar, and Darrang; forest officers from Darrang and Sibsgar; and SDO of Mangaldai. "Proceedings of the discussion held on the 15th August 1916 in connection with the extension of the Kaziranga Game Sanctuary", no. 195, September 1917, Revenue–A, ASP.

between the wild and tamed buffalos was inevitable, and he dismissed the contagion theory. J. A. Dawson[109], the Deputy Commissioner, Nowgong was more forthright in rejecting the expansion proposal. He retorted that, "cultivation or grazing should not be sacrificed to sentimental considerations [game concerns]." Playfair and Dawson, both at the helm of expanding cultivation and revenue, reflected the dominant fear of the time that dispersed livestock could risk cultivation. In contrast, the forest officials pointed out to several *tapus* to which the graziers could relocate. However, these *tapus* could neither put up the proposed area's 4,800 buffalos (estimated in September 1915) nor were they immune to floods. Above all, dispersing the herds to these *tapus* risked cultivation. An uneasy consensus was arrived at. The graziers were to relocate to the *chaporis* north of the proposed reserve though these submerged in the monsoon. Despite this compromise among the officials, P. R. T. Gurdon, the commissioner of Assam Valley Districts, refused to add the area in question to the Game Reserve. Gurdon found the compensation payable "difficult to justify, especially during present time of war".[110] Despite Gurdon's disapproval, Archdale Earle (the Chief Commissioner) approved the inclusion of the stretch to the Game Reserve.[111]

What explained Earle's overruling the revenue officials' reluctance to include the area in reserve? He agreed with the planters that Game Reserve was meaningless with the presence of the graziers and their livestock in the area. Revenue officials' observation that the wild and the domestic were inseparable—as in the buffalo case—could not undo the colonial view that the nature existed where humans did not. Earle, the head of the Government of Assam, was stewarding the empire's heritage by creating room for nature that required him to rise above the departmental feuds. The fears that dispersing the graziers would put the

[109] Dawson is remembered today in Nagaon with a school established in his name.

[110] From Commissioner, AVD to the Second Secretary to the Chief Commissioner, 3 December 1916, no. 201, September 1917, Revenue–A, ASP.

[111] From the Chief Secretary to the Chief Commissioner to the Commissioner, AVD, 23 January 1917, no. 203, September 1917, Revenue–A, ASP.

agrarian order in disarray had a little sway on him. Colonial government still believed in the availability of immense resources in Assam.[112] The colonial view of the graziers and shifting cultivators as nomadic heavily influenced their undesirability to stay in the proposed reserve. Even this view needs some qualification with respect to two most affected groups—the Nepalis and Mishings. Unlike the Assamese, who were largely *pam* cultivators (men) with their permanent villages elsewhere, the Mishings had established households comprised of men, women, and children. But, they changed their fields every 2-3 years. The Nepalis, who made up the bulk of the graziers, stood somewhere between the Assamese and the Mishings in terms of their dwelling. Many of their households lived in the north bank villages, but the rest living here had men, women, and children.[113] Such nature of dwelling of the Mishings and the Nepalis uprooted during the reserve's expansion followed an intense contestation.

Chabilal Upadhyay (1882–1980), an influential Nepali grazier from Behali, Darrang, led a strong protest against the government's decision.[114] The graziers reminded the government of the concerns over the conflict between grazing and cultivation. They argued these *chaporis* added Rs. 7,000 as grazing tax and fulfilled the demand for milk products in various towns. Upadhyay's petition enclosed government's recognition for his contribution (organizing soldiers and labourers, war loans) to the British war efforts.[115] Amid intense

[112] The Government of Assam was preparing to attract the Bengali Muslim peasants to take up riparian land for jute cultivation under a colonization scheme. S. N. Datta, *Report of the Resettlement of the Nowgong District during the Years 1926 (October) to 1932 (January)* (Shillong: Assam Secretariat Press, 1933), 22.

[113] A low average family size (AFS) of 1.5 among the Assamese indicated that only male members came here for *pam* cultivation for a certain period of the year. In contrast, an AFS of 4.63 among the Mishings meant most households comprised of men, women, and children. AFS of 2.93 among the Nepalis suggest that some households had permanent residences elsewhere, and others lived here permanently. See Table 2.2.

[114] Chabilal Upadhyay and others' petition to the chief secretary to the Chief Commissioner, 24 March 1917, file no. 160R, 1918, Revenue (IIIF), ASA. This was one of several such petitions Upadhyay and graziers sent to the top officials to reverse the decision to remove them from Arimora, Boralimara, Latabari, and Betkati *chaporis*, proposed for inclusion in the Kaziranga Game Reserve. Note that graziers were dispersed in various *tapu*s beyond the four villages where the officials enumerated.

[115] Chabilal Upadhyay and others to the Chief Commissioner, 16 August 1918, nos. 68-90, B–Progs., November 1918, Revenue, ASA.

petitioning, the government carried on its move to acquire the land.[116] Yet, the issue dragged on for more than a year that saw a sharp difference in opinion among the officials. Gurdon, who originally disapproved of the proposal, stood firm with a hope that Nicholas Beatson-Bell, the new Chief Commissioner,[117] will take a fresh look.[118] The graziers, according to Gurdon, had a "reasonable" claim to the land, and he asked them to stay put pending Beatson-Bell's order. However, Gurdon found no support among the officials who advised the latter.[119]

The Game Reserve's expansion by evicting the graziers opened up larger questions about the resource allocation in the frontier province. The issue drew some intense reactions in the press. O. A. Byrne, the owner of Tezpur Saw Mill, condemned the government over "the constant and unjustifiable acquisition of land".[120] Byrne declared that his interests were similar to the graziers facing eviction. Indeed, there were high stakes involved. In 1900, the government issued Byrne a license to extract timber from the USF, mainly in the riparian areas. In the official version of the story, he was a low-hanging fruit seeker, working no further than 30 miles from his mill on the river route. His license included the USF in the Sibsagar Forest Division, and the proposed addition fell within his catchment area.[121] In the 1910s, the FD experimented with supplying the wooden tea boxes (through local saw mills) to the planters who imported it otherwise. *Simul*, a rapidly growing species on the

[116] See CF's notes on pp. 25-26, file no. 160R, Revenue (IIIF), 1918, ASA; Gazette notification no. 3560R, 26 July 1917, Government of Assam.

[117] In 1918, the Chief Commissioner Archdale Earle completed his term, and Nicholas Beatson-Bell joined.

[118] From Commissioner, AVD to Chief Commissioner, 9 July 1917, file no.160R, 1918, Revenue (IIIF), ASA.

[119] W. F. L. Tottenham, the CF, Eastern Circle, wrote a scathing attack on Gurdon (see his notes at pp. 18-19) that served as an argument for other officials to stick to the previous chief commissioner's decision. See C. S. Gunning, the US's comments at pp. 28-32, file no. 160R, 1918, Revenue (IIIF), ASA.

[120] O. A. Byrne's "Letter to editor", *The Times of Assam*, 24 August 1918, in File no. 223R, 1918, Revenue (IIIF), ASA.

[121] See O. A. Byrne's letter to the Inspector General of Forests, 18 June 1917 and latter's note on pp. 4-5, 26 July 1917, file no. 8 of 17, October 1917, Office of Inspector General of Forests, Abhilekh Patal, National Archives of India (NAI). In 1917, Byrne ran the mill for 20 years and got the past USF leases in very favourable terms. While he was highly appreciative of the past forest officials, he was equally bitter of the present.

floodplains, was the most suitable softwood for the purpose.[122] If the proposed addition were to materialise, sizable area would lie out of Byrne's reach to gain from the new prospects.

An editorial in *The Times of Assam*—the only English-language newspaper from Assam—backed the protest.[123] Disgruntled prospectors like Byrne saw the FD's ever-increasing territory a threat to their prospects.[124] A native prospector, most likely an Assamese planter wrote, "Are the wants and wishes of the people are taken into consideration by Government in the disposal and reservation of the land and its produce? Waste lands in Assam appear to be like a toy in the hands of the government."[125] Graziers, sawyers, and native tea planters all believed in their role as vital in opening up the frontier province. Their resistance to the Game Reserve expansion shows competing visions of the province's 'improvement'. Moreover, their anxieties reflect rapidly exhausting resource frontier, further complicated by the Game Reserve.

The political context of the mid-1910s reinforced the native claim over natural resources. The land acquisition for the Kaziranga Game Reserve took place amidst the Home Rule Movement[126] and the First World War (1914–1919). Leaders like Bal Gangadhar Tilak highlighted the grievances against the FD (in British India) to draw support for the movement.[127] However, Gandhi and Tilak raised money and men for the British to fight the war. Tilak termed war debentures "the title deeds of Home Rule". Upadhyay also bought war

[122] For more discussion on this, see Dey, *Tea Environments and Plantation Culture*, 2018, chapter 5.

[123] "A Public Grievance of the First Magnitude", *The Times of Assam*, 31 August 1918, file no. 223R, 1918, Revenue (IIIF), ASA.

[124] During 1902–1912, the FD added 1,900 sq. km to its 8,400 sq. km RFs. Saikia, *Forests and Ecological History*, 77. Figures rounded up to the nearest hundred.

[125] Anonymous, "Letter to Editor," *The Times of Assam*, 14 September 1918, file no. 223R, 1918, Revenue (IIIF), ASA.

[126] The movement (1916-18) demanded self-government by the Indians and is considered to be a precursor to the Indian National Movement against British colonialism. See Sumit Sarkar, *Modern India, 1885-1947* (New Delhi: Pearson, 2014), 129-131.

[127] Sarkar, *Modern India*, 130.

loans and raised soldiers for the British. Did he wish for self-rule in the near future? There is no direct evidence to support or refute this. However, multiplying grazing tax and rapid expansion of the RFs reduced the elbow room for the graziers.[128] Byrne probably got it right when he jibed on the reserves locked from the peasants: "it is wondered why they demand Home Rule."[129] The government took the press reports seriously. However, Beatson-Bell was not "prepared to reopen this question". He preferred issuing a resolution dismissing the plea and the press reports. The resolution reiterated the two arguments to justify the land acquisition—the contagion threat and the need for highlands for wildlife.[130] It was evident from the ground enquiry that there was no other land for the graziers to move. Despite this, the resolution noted, "few removed settlers will have no difficulty in securing land in the still considerable waste areas on the province." To justify the 422 sq. km—the size the Game Reserve was going to become—the resolution quoted how the Yellowstone National Park, USA, was spread over thousands of square miles. Allaying the press's concerns about unwise closure of land, it noted "no permanent cultivation, and only about 300 acres of fluctuating cultivation has been sacrificed to the reserve".

Despite the repeated government orders, the Nepalis and Mishings refused to relocate. Years of petitioning and occasional stays probably gave them a hope of a favourable review. In 1920, the FD evicted them by burning their *bathans*.[131] It was probably the first instance in the province when humans were evicted to conserve nature. Some Mishings went to the north

[128] In 1888, the grazing tax was eight annas per head of buffalo per annum and four annas per head of cows. In 1907, the government increased tax to Re. 1 per head of buffalo. In 1915, graziers had to pay Rs. 3 per head of buffalo and six annas per head of a cow. Guha, *Planter Raj to Swaraj*, 74-75.

[129] O. A. Byrne's "Letter to Editor", *The Times of Assam*, 24 August 1918, file no. 223R, 1918, Revenue (IIIF), ASA.

[130] "Resolution on the constitution of the Kaziranga Game Reserve", No. 7530F, 29 October 1918, file no. 223R, 1918, Revenue (IIIF), ASA.

[131] See "History Sheet of Tarun Ram Phukan", file no. 66, KW-Part-X, 1924, Home (Political), Abhilekh Patal, NAI; see Saikia, *Kazirangar Buniyad*, 18. Saikia mentions that his father accompanied forest guards to burn the houses.

bank and others shifted eastward near the mouth of the Dhansiri River.[132] The Nepalis shifted their *bathans* to the *tapus* north of the newly included area. Upadhyay led the angry Nepalis to support Gandhi's Non-cooperation Movement.[133] In 1921, Upadhyay chaired the first session of the Assam Pradesh Congress Committee in Jorhat and remained a lifelong Congress Party loyalist. The removal from Kaziranga's pastures has survived through the Nepali and Mishing public memory for several generations now.[134]

Within a decade of establishment, Kaziranga Game Reserve's area nearly doubled. The new Game Reserve contested with several patterns of land use— tea gardens, RFs, and pastoralism—set in motion by the colonial rule in the nineteenth century. The planters dominated the course of the expansion of the Game Reserve. Most revenue officials were unwilling to concede the proposed area to the Game Reserve. However, the final decision on the question sided with the planters and forest officials. To achieve this end, planters like F. W. Gore wielded significant influence over the Chief Commissioner.[135] Gore amply drove home the point that wild animals cannot be protected in the presence of the graziers and peasants.[136] Protective measures proposed by planters projected their view of an 'estate' to a Game Reserve. They thought of "large river, or a wide road" as effective boundaries.[137]

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[132] Mishing oral history in the KNP's says their forefathers relocated from the erstwhile Kaziranga Reserve. Pegu, *Mor Jivan Drishti*, 4; however, Mishing villages were not directly affected during the orginal settlement of the Game Reserve. These villages were added to the reserve only during its expansion in 1918-20.

[133] Bishnulal Upadhyay, "Chabilal Upadhyay," In *Bishnulal Upadhyay Rachana Sankalan (Writings of Bishnulal Upadhyay)*, ed. Khemraj Nepal (Guwahati: Loknath Upadhyay, 2017, first published in 1985 by Kul Bahadur Chetry, Margherita), 167-238; for the Congress Party mobilisation of the affected people in Behali, Darrang, see "History Sheet of Tarun Ram Phukan" in file no. 66, KW-Part-X, 1924, Home (Political), Abhilekh Patal, NAI; see Omeo Kumar Das, *Jivan-Smriti* (Guwahati: Assam Publication Board, 1983), 172-73.

[134] For the Nepali public memory, see Gita Upadhyay, *Janmabhumi Mero Swadesh* [Birthplace is my Nation] (Guwahati: Anurag Prakashan, 2013); for Mishings', see Pegu, *Mor Jivan Drishti*, 4-5.

[135] Gore was present when the Chief Commissioner met with other top officials to discuss the issue. See "Extract from the copy of memorandum of proceedings of a meeting held at Government House on June the 27th, 1916", no. 192, September 1917, Revenue–A, ASP.

[136] From Gore to the Chief Commissioner, 19 August 1916, no. 198, September 1917, Revenue–A, ASP.

[137] "Note on Kaziranga Sanctuary", no. 42, May 1914, Revenue–A, ASP.

Playfair contested, "I have personal knowledge of rhinoceros crossing the trunk road."[138] The ever-changing courses of the Brahmaputra's channels quashed the most authoritative official demarcations.[139] Wild animals too defied man-made boundaries in search of new pastures.[140] Planters' demand to separate the wild from the domestic was equally strange to the agro-ecological realities. As discussed in chapter 1, domestic buffalo breeders in Assam depended on the wild males for breeding. The revenue officials understood such proximity as essential to keeping the domestic stock's health.[141] However, the idea that nature can be protected only where there are no humans outdid these complex realities.

Planters' push to expand the Game Reserve had a subtext to win shooting concessions inside it.[142] Simultaneously, the Darrang Game Association—represented by a group of European planters—was seeking lease of game tracts.[143] The government allowed the association to manage two game tracts, Gohpur and Barchola (Darrang District), for ten years starting 1915.[144] The arrangement did not last long, and the association went out of existence before the term expired.[145] However, the Game Reserve expansion episode shows how the European planters saw the peasants as *bête noire* to their game interest. While the planters could not win over the revenue officials, they earned support from the forest officials

[138] From Playfair, DC, Sibsagar to the Commissioner, AVD, 2 June 1913, no. 46, May 1914, Revenue–A, ASP.

[139] "Proceedings", no. 186, September 1917, Revenue–A, ASP.

[140] It is more evident today that rhinos straddle across all boundaries. Rahul Karmakar, "Rhino habitat under threat of mining," *The Hindu.* June 23, 2018, https://www.thehindu.com/news/national/other-states/rhino-habitat-under-threat-of-mining/article24242589.ece (accessed on 25 June 2018).

[141] From Playfair, DC, Sibsagar to the Commissioner, AVD, 2 June 1913, no. 46, May 1914, Revenue–A, ASP.

[142] From F. W. Gore to the Chief Commissioner, Assam, 27 August 1913, no. 43, May 1914, Revenue–A, ASP.

[143] "Memorial from the members of the Game Association, Darrang regarding the reservation of certain areas in mauzas Barchola and Gohpur and leasing out to the Association of sporting rights therein and in other reserves in that district", no. 35-46, February 1913, Revenue–A, ASP.

[144] Saikia, *Forests and Ecological History of Assam*, 267-268.

[145] T. Trafford, *PRFA 1924-25* (Shillong: AGP, 1925), 18.

accustomed to a paradigm of closure.[146] However, the forest officials had reasons to grow wary about the increasing influence of the non-state actors like the planters in the matter of Game Reserve. Gore advocated shooting bull *mithun* (*Bos frontalis*) in the Game Reserve, mentioning that they descended from the hills and were not worth protecting.[147] W. F. L. Tottenham, the conservator, quipped, "it would be well that animals should have some place where they could be quiet."[148] The forest officials declined to involve planters in Kaziranga Game Sanctuary in the 1920s as well.[149] In 1916, the government renamed the Game Reserve Kaziranga Game Sanctuary, signifying an end to sport hunting.[150] Distaste to hunting for food, trade, or sport as a rationale for conservation was a new paradigm in other British colonies like South Africa.[151] Planters' efforts succeeded only to strengthen the FD's control in wildlife preservation.

Meanwhile, severe peasant anger was building up around the Kaziranga Sanctuary. Its successive expansion shrunk the commons for the rapidly growing chain of villages around it. Protection and ban on hunting slowly increased the population of rhino[152] and other wild animals. The wild animals routinely crossed the carefully drawn boundaries—usually rivers and streams—to raid crop. The new villages closer to the reserve were more prone to wildlife depredation than the older ones further south.[153] The sphere of criminalisation for violation of forest laws increased too. Government's decision to keep the sanctuary completely closed to

[146] For forest officials' view of RFs, see Rangarajan, *Fencing the Forests*, 1996; Saikia, *Forests and Ecological History of Assam*.

[147] *Mithun* still has a presence in the Eastern Himalayas.

[148] Gore argued that to shoot few heads of old buffalo was "in the interest of game itself" as "these buffalos were no longer good for breeding themselves", no. 192, September 1917, Revenue–A, ASP.

[149] From Deputy Conservator of Forests (DCF), Sibsagar to the DC, Sibsagar, 3 March 1925 (no. B-468), file no. X-28, 1925, Revenue, ASA.

[150] Saikia, *Forests and Ecological History of Assam*, 274.

[151] Carruthers, *The Kruger National Park*, 51-52.

[152] By one estimate, in 1925, there were 30–40 rhinos in the sanctuary. From SDO, Golaghat to the DC, Sibsagar, 17 January 1925 (no. 1521R), file no. X-28, 1925, Revenue, ASA.

[153] SDC, Kamargaon to the SDO, Golaghat, 23 December 1924, ibid.

hunting must have baffled the villagers, given that until recently, they could win rewards for killing wild animals. The twin blow of dispossession (ban on hunting) and depredation (crop raid by wild animals) angered the villagers. Peasants realised the problem with greater intensity every passing year, and petitioned the government. In 1924, villagers cutting across linguistic and tribal groups petitioned the Governor of Assam about wildlife depredation, increased penalisation, and their resultant indebtedness. They pleaded to move back the reserve's southern boundary by four miles.[154]

Rapidly changing agrarian conditions compelled the government to review the game preservation and usufruct rights. The conservator saw in the petition a ploy to undo the sanctuary completely.[155] A junior revenue official who visited the locality, proposed to keep a stretch along the Mora-diphalu clear of grass and jungle through livestock grazing.[156] The conservator agreed to the proposal. Accordingly, the FD issued grazing permits to the villagers.[157] These concessions were crucial for the FD to earn the peasants' goodwill for a decade when the rhino population revived.[158] On the hindsight, though the sanctuary was envisioned off limits to human activities, such administrative conveniences kept them alive here.

The Dark Clouds

As the Government of Assam tried to pacify the unhappy peasants, the South African government converted the Sabi Game Reserve to the Kruger National Park in 1926. South

[154] K. C. Saikia and others' petition to the Governor of Assam, 12 August 1924, ibid. The petition—written to the highest authority in the province—reflects toilsome petitioning by the villagers.

[155] From CF to the second secretary, 6 December 1924 (no. A/212), ibid.

[156] From SDO, Golaghat to the DC, Sibsagar, 17 January 1925 (no. 1521R), ibid.

[157] From DCF, Sibsagar to the DC, Sibsagar, 3 March 1925 (no. B-468), ibid.

[158] In 1939, M. C. Miri, a forest official posted in the sanctuary in the 1930s estimated that there were about hundred rhinos. M. C. Miri, "Note on the rhinoceros captured during last October for the American Zoo", *Indian Forester*, April 1939: 207-210; formal wildlife census had to wait until 1966, see chapter 3.

African politics—that intensely discussed wildlife preservation—was influential in achieving this.[159] In contrast, the wildlife, except the elephant and 'vermin' carnivores, was largely missing from the provincial body politic of Assam to merit such long leaps. Despite doubling its size, the Kaziranga Game Sanctuary was hardly an entrenched idea in the official circle. Revenue officials' cynicism about it continued well into the 1920s. C. S. Gunning, the Officiating Deputy Commissioner, Sibsagar asked: "whether the continued reservation of such a large Game Sanctuary can be held justifiable."[160] He saw that a portion of "this large area will sooner or later have to be surrendered for the purpose." Gunning made a U-turn from his position on the sanctuary a decade ago. In 1917-18, posted as a junior officer in the Assam secretariat, he was impatient at Gurdon's reluctance to give away a stretch of land to the sanctuary.[161] Gunning's volte-face is typical of a colonial official's departmental pegging. For a revenue official, it was onerous to think beyond safeguarding the sources of revenue.

During 1910–1930, nearly 4,400 sq. km of woodlands and grasslands in Assam made way for the cultivated land.[162] Jute cultivation by the Bengali Muslim peasants created greater demand for land in the floodplains.[163] As the twentieth century progressed, the floodplains in the sanctuary's north became the conflict zones between graziers and cultivators.[164] The

[159] Carruthers, *The Kruger National Park*, 60-64.

[160] From the offg. DC, Sibsagar to the Commissioner, AVD, 6 March 1925 (no. 3768R), file no. X-28, 1925, Revenue, ASA; Similarly, the DC, Kamrup wrote to the Divisional Forest Officer (DFO), Kamrup: "there is also the large question of the Game Sanctuary, a considerable part of which can be thrown open, if it is finally decided that the game cannot be protected", quoted in Milroy, *Note on Game Preservation in Assam*, 6.

[161] See C. S. Gunning's comments at pp. 28-32 in file no. 160R, 1918, Revenue (IIIF), ASA.

[162] During 1910–1930, the share of arable land increased from 18.4 to 25.6 per cent. For the period, the share of woodland declined from 25.2 to 22.0 per cent and grassland from 27.1 to 24.6 per cent. Richards and Hagen, "A Century of Rural Expansion in Assam", 197.

[163] During 1910-1930, the acreage under jute increased from 134 sq. km (1.18 per cent) to 697 sq. km (4.42 per cent) (Percentage of net sown area in parenthesis), ibid.

[164] See "Chatia Rayotsabha", *Dainik Batari*, 20 October 1935, 2; Durga Ghimire, *Mero Drishti ko Seropheroma Budachhappadi* [Budachhappadi through my Glimpses] (Tezpur: Bidya Ghimire, 1983), 14-15.

Government of India adopted a favourable gun policy to support agrarian expansion.[165] Lord Irwin, the Viceroy of India (1926–1931), turned down the SPFE's request to repeal gun licenses to the Indians. In Assam, by the late 1910s, crop protection guns were in wide circulation.[166] Forest officials blamed these guns for the depletion of fauna outside the sanctuaries.[167] Under the Wild Birds and Animals Act 1912, a closed season for hunting was in place even outside the reserved areas.[168] However, the forest officials voiced the view that the Act was a "dead letter". They declared that the Assamese and Nepalis carried out "wholesale slaughter" of deer and other animals using nets, spears, and guns.[169] As we discussed in the previous chapter, these were traditional practices in the peasants' world that refused to walk alongside the colonial change in attitude towards wildlife. However, the peasants were not the only aggressor on the wildlife.

Critiques like O. A. Byrne alleged that the government expanded the Kaziranga Game Reserve to enable the official elites to shoot and enjoy. In 1918, the government restated its position that the sanctuary disallowed all kinds of hunting.[170] Although the Darrang Game Association got leases in shooting tracts, the European planters failed to impress the forest officials to shoot in the Game Reserves. They had to find their game in the grassland outside it. Ironically, despite growing concerns over rhino protection,[171] there was no curb on its killing outside the reserved areas. The government added pigeons to the closed season list,

[165] As the threat of rebellion declined in the twentieth century, the government issued gun licenses to the Indians. Mackenzie, *The Empire of Nature*, 285-87.

[166] There were 4,500 gun licenses in 1917-18, Saikia, *Forests and Ecological History of Assam,* 267.

[167] Milroy, *Note on Game Preservation in Assam*, 5-6.

[168] Gazette Notification no. 6675R, 15 December 1913, Government of Assam.

[169] Tottenham and Blunt, *PRFA 1915-1916*, 7.

[170] Resolution on the constitution of the Kaziranga Game Reserve, No. 7530F dated 29 October 1918, file no. 223R, Revenue (IIIF), 1918, ASA.

[171] Refer to the discussion over adding more areas to the Game Reserve to afford it greater protection.

but rhino was "still under consideration."[172] The rhino wandered in and out of the sanctuaries. Planters and European officials made most of such occasions to bag their rhino trophies.[173] The rhino population was barely thirty after a decade of protection in Kaziranga Game Sanctuary.[174] Such depletion outside the sanctuary is striking for a near-extinct species.

Wildlife preservation gained renewed government attention from the late 1920s. In 1928-29, A. J. W. Milroy rose to the rank of a conservator of forests in the Assam FD. He was already widely credited with reforming elephant catching operations.[175] Milroy was concerned about the depleting wildlife outside the sanctuaries due to rapid agricultural expansion.[176] Meanwhile, for the colonial officials, impending political changes—which would mean greater political power for the Indians—appeared to be a major threat to wildlife. The Government of Assam's memorandum to the Indian Statutory Commission (or Simon Commission) mentioned, "there is a danger that a local government or a Legislative Council may not appreciate the scientific importance of maintaining such sanctuaries".[177] In other words, officials like Milroy feared that the newly empowered native politicians would demand sanctuary land for cultivation.[178] Therefore, the Government of Assam proposed to transfer the sanctuaries as a 'central subject' that would bring it under the Government of

[172] Gazette notification no. 6675R, 15 December 1913, Government of Assam.

[173] "A Record Rhino", *The Englishman*, 4 May 1909; H. S. Wood, a military officer, narrates about his hunting trip (undated, presumably during 1922-1927) north of the sanctuary. H. S. Wood, *Shikar Memories: A Record of Sport and Observation in India and Burma* (London: H. F. & G. Witherby, 1934), 170-181.

[174] From CF (Eastern Circle) to the Chief Secretary to the Chief Commissioner, 22 May 1917, nos. 354-358, B–Progs., March 1918, Revenue, ASA.

[175] A. J. W. Milroy, *A Short Treatise on the Management of Elephants* (Shillong: The Government Press, Assam, 1922); also see C. G. M. Mackarness, *PRFA 1936-37* (Shillong: AGP, 1937), 11-12.

[176] A. J. W. Milroy, "Game preservation in Assam," *Journal of the Society for the Preservation of the Fauna of the Empire* 16 (1932), 29.

[177] Government of Assam, *Memorandum Submitted by the Government of Assam to the Indian Statutory Commission* (London: His Majesty's Stationery Office, 1930), 466.

[178] The memorandum does not mention Milroy. However, Milroy expressed this fear in several writings, and his role in pushing for the Government of India to take over the sanctuaries is evident. For instance, see Milroy, "Game preservation in Assam".

India's control. It argued that the central government should finance the maintenance of a sanctuary because its scientific value is not restricted to the province. The Great Depression severely shrunk the revenue, and the colonial government adopted a cutback in all financial commitments.[179] The proposal remained a non-starter, but resurfaced after independence with similar fear.

Speculations on the Indian politicians' commitment to wildlife preservation aside, the sanctuaries and wildlife faced real challenge from agricultural expansion. Since the proposal to establish the Kaziranga Game Reserve in 1905 and Milroy becoming the Conservator of Forests, the Kaziranga environs received two land revenue resettlements—instruments to achieve a more settled pattern of peasant agriculture.[180] In the 1920s, the Bengali Muslim peasants put intense pressure to open the neighbouring Laokhowa Game Reserve for cultivation.[181] Preservation thinking in the government, especially Milroy's, responded to such rapid agrarian expansion in the province and the speculations that the future politics would favour it. However, Milroy could hardly alter the colonial government's foundation that rested upon the continuous growth in land revenue. Milroy knew that he must focus on safeguarding the sanctuaries. Winning support for wildlife conservation from a government committed to expanding agriculture was not easy. In 1928—the year before Milroy became the topmost forest official—he prepared a detailed report on the measures to protect North Kamrup Sanctuary (later Manas).[182] His proposal signified a shift from the paradigm of 'preservation' to 'conservation'.[183] Milroy's conservation strategy combined generating

[179] Dietmar Rothermund, "The Great Depression and British Financial Policy in India, 1929-34," *The Indian Economic and Social History Review*, 1981: 1-17.

[180] Hart, *Land Revenue Settlement of the Sibsagar District, 1906;* Rhodes, *Land Revenue Settlement of the Sibsagar District*, 1929.

[181] From DFO, Nowgong to CF, Assam, 3 February 1927 (no. A/14), ASA, file no. X-26, 1927, Revenue, ASA.

[182] "Report on the North Kamrup Game Sanctuary", file no. X-34, 1928, Revenue, ASA.

[183] The term preservation refers to leaving nature untouched. In contrast, conservation refers to the sustainable management of natural resources.

public support, active management of wildlife population, and making sanctuaries self-sufficient. He proposed issuing a limited number of shooting licenses every year against a fee. Besides generating revenue, it would ensure healthy publicity by making the game scarce, and protecting them against congestion and epidemics. Milroy's proposal to allow shooting inside the sanctuary did not attract the government.[184] Meanwhile, Milroy had greater urgencies to respond to.

In 1928-29, there were reports of widespread rhino killing in the Manas Sanctuary. The annual forest report of the year mentioned that "rumour has it that one man alone disposed of 8 horns."[185] In the next year's report, Milroy wrote, "the Monas, which is infested by bands of Cacharis armed with unlicensed guns for the destruction of rhino."[186] In 1930—the year of the Civil Disobedience movement—reports of armed groups was enough to attract the Governor of Assam's concerns and attention.[187] The FD launched a vigorous "anti-poaching campaign" in Manas and Goalpara forests. In February 1931, a unit of Assam Rifles camped in Manas for six weeks. In Milroy's words, the rhino killers "buried their unlicensed guns and remained peacefully at home" and if they retort again, "the rifles will speedily return."[188] Milroy's subtle branding of the rhino killing as a spin-off of the political movement—though these continued from a couple years ago—brought government's timely attention to Manas.

[184] Milroy, *Note on Game Preservation in Assam*, 2.

[185] F. H. Cavendish, *PRFA 1928-29* (Shillong: AGP, 1929), 19.

[186] A. J. W. Milroy, *PRFA 1929-30* (Shillong: AGP, 1930), 4.

[187] Governor in Council's resolution, in Milroy, *PRFA 1929-30*; A. J. W. Milroy, *PRFA 1930-31* (Shillong: AGP, 1931), 4-5; intelligence reports said that Congress leaders like Chandra Prabha Saikiani incited peasants to defy forest laws in north Kamrup, file no.18-XIII-Dece, 1930, Home (Political), Abhilekh Patal, NAI.

[188] Milroy, *PRFA 1930-31*, 4-5.

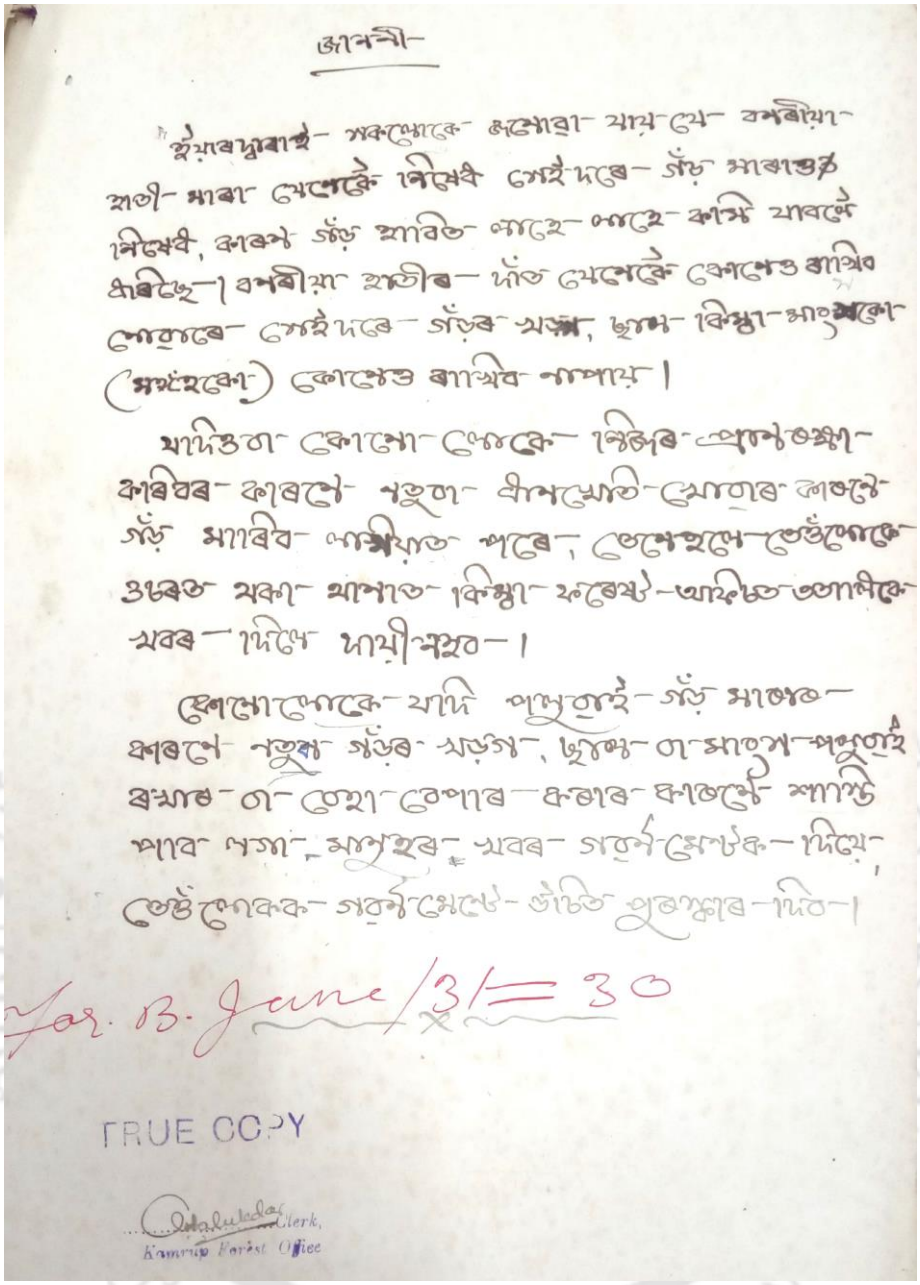


Figure 2.3: A FD notice (in Assamese) in Kamrup banning the possession of rhino horn and hide, 1931. Source: Nos. 25-30, B–Progs. for June 1931, Revenue (Forest), ASA.

Milroy was further able to introduce several reforms in the out-dated game laws. The penalty for killing a rhino inside the RF was a maximum of Rs. 50, while the horn fetched around Rs. 1,200 (presumably per kg) in 1930.[189] Milroy revised the punishment to imprisonment up to six months or a fine up to Rs. 1,000 or both.[190] He also raised the

[189] CF's (Western Circle) notes on p. 1, in nos. 18-19, B–Progs., June 1931, Revenue (Forest), ASA.

[190] J. S. Owden, *PRFA 1931-32* (Shillong: AGP, 1932), 5.

punishment for killing rhino in USF from Rs. 300 and one-month imprisonment to Rs. 500 and six months.[191] In 1921, the Government of Assam banned the killing of rhinos in all seasons and everywhere.[192] Killing for self-defence was allowed, and the Chief Commissioner could still permit shooting a rhino. However, the law was still silent on what will happen to the horn, hide, and meat of the rhino and ivory of the elephant hence killed.[193] Bengal also faced similar paradoxes and pushed for legislation to make the carcass a government property even if it was killed in self-defence. Milroy borrowed from the developments in Bengal and pushed for government ownership of the carcass hoping that it would deter killing.[194] Milroy pushed a bill criminalizing the possession of rhino horn and elephant ivory in the Assam Legislative Council in 1933.[195] Most Indian members—themselves elephant owners—opposed the bill. They argued that the elephant owners preserved the ivory from their dead elephants as a family treasure. While the case of ivory did not win support, the Council criminalised the possession of rhino horn. At least in principle, the government established a monopoly over the rhino horn. Such initiatives, however, did not immediately produce encouraging results in protecting the rhino.[196]

[191] Assam Gazette Notification no. 1250R, 27 April 1931, in nos. 18-19, B–Progs., June 1931, Revenue (Forest), ASA.

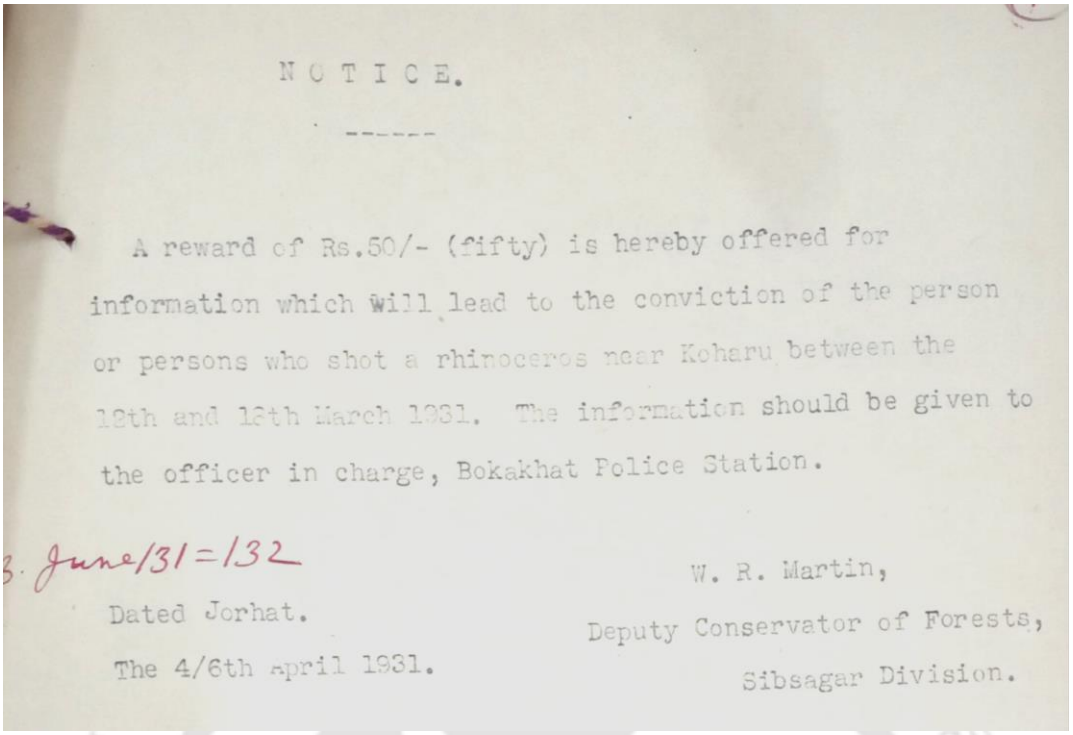
[192] ASP, Revenue, Forest–A, April 1921, nos. 14-63, quoted in nos. 25-30, June 1931, B–Progs., Revenue (Forest), ASA.

[193] See notes on pp. 1-2 in file no. 632, 1930, Revenue (Forest), ASA.

[194] From CF (Eastern Circle) to the chief secretary, 4 August 1930 (no. A/190), nos. 25-30, June 1931, B–Progs., Revenue (Forest), ASA.

[195] *Assam Legislative Council Debates (ALCD)*, 22 March 1933, 785-794.

[196] In 1931-32, the forest officials reportedly caught rhino killers red-handed. The magistrate acquitted the accused, and the DC turned down the appeal for a retrial. See Owden, *PRFA 1931-32*, 5.



NOTICE.

A reward of Rs.50/- (fifty) is hereby offered for information which will lead to the conviction of the person or persons who shot a rhinoceros near Koharu between the 12th and 16th March 1931. The information should be given to the officer in charge, Bokakhat Police Station.

3. June/31=132

Dated Jorhat.
The 4/6th April 1931.

W. R. Martin,
Deputy Conservator of Forests,
Sibsagar Division.

Figure 2.4: A reward notice for information on rhino killers in the Kaziraga Game Sanctuary, 1931. Source: Nos. 129-134, B–Progs. for June 1931, Revenue (Forest), ASA.

All these government initiatives came at the backdrop of rhino killing in Manas discussed above. Meanwhile, the Kaziranga Sanctuary remained almost opaque to even an enthusiast like Milroy.[197] Reports of massive rhino killing started flowing in from Kaziranga. Milroy reasoned that as the forest officials and Assam Rifles combed Manas, rhino killing shifted to Kaziranga.[198] However, this explanation elides the fact that during 1931–1933 Brahmaputra Valley's peasants reeled under agrarian distress with soaring unpaid land revenue.[199] The handsome price a rhino horn fetched was probably a strong lure for some peasants to earn the much-needed cash to repay their debt and taxes. The FD announced

[197] A. J. W. Milroy, *PRFA 1932-33* (Shillong: AGP, 1933), 4.

[198] Milroy, *Note on Game Preservation in Assam*, 4.

[199] The unpaid revenue in the *ryotwary* districts rose from Rs. 2 lakh in 1928 to Rs. 7 lakh in 1930 and Rs. 37 lakh in 1933. Guha, *Planter Raj to Swaraj*, 143.

rewards for informing on the rhino killers (Fig. 2). Intense patrolling in the sanctuary by the Assistant Conservator of Forests M. C. Miri checked the killings.[200]

Reports of rhino killing had a harsh bearing on the peasants' resource use in the sanctuaries. The FD withdrew the villagers' rights to collect forest produces during the Assam Rifles' stay in Manas.[201] In Kaziranga Sanctuary, forest officials viewed limited grazing and fishing—allowed by the government—as a "cover to kill rhinos."[202] Milroy was very hostile to the idea of allowing livestock grazing in the sanctuaries. He stopped villagers grazing along the sanctuary's southern edge and auctioning of the *beels*. However, he allowed the Nepali graziers in the northern riparian fringes. Milroy argued that it was not "practicable" to remove them given the fodder scarcity elsewhere. In fact, the exception was made to win the graziers' support to keep the illegal hunters away from the poorly guarded northern periphery.[203] Such concessions were in sharp contrast to the growing understanding in the international nature protection circle during the interwar years that natural heritage can be protected only by separating humans from nature.[204] The local complexities compelled the government to allow grazing in the sanctuary though the rulebook and 'universal' wisdom both were against it.

[200] A. J. W. Milroy, *PRFA 1934-35* (Shillong: AGP, 1935), 19.

[201] Gazette Notification no. 547R, 21 February 1931, Government of Assam.

[202] We discussed that grazing permit along the southern boundary was a reconciliatory arrangement in 1924-25 following loud protests against the Game Reserve by the villagers. In the northern periphery, river's changing course brought several *tapus*—used by the graziers ousted from the Game Reserve in 1920—next to the sanctuary; in 1933, the FD leased some sanctuary *beels* to a Darrang fisher for Rs. 1,400. Milroy, *Note on Game Preservation in Assam*, 9.

[203] Milroy, *PRFA 1934-35*, 20.

[204] Corey Ross, "Tropical Nature as Global *Patrimoine*: Imperialism and International Nature Protection in the Early Twentieth Century", *Past & Present* 226, no. Supplement_10 (2015): 214-239, 233.

Milroy's Legacy

Milroy died in 1936 leaving deep imprints on wildlife conservation in Assam. His approach was in sharp contrast to the emerging international advocacy leaning towards an 'untouched nature'. Against the growing clamour for separating humans from nature as a measure of protection, he framed preservation issues within the agrarian context. In 1923-24, Milroy reserved certain wild buffalo tracts and invited the Assamese owners to breed their cow buffalos.[205] Pitambar Deb Goswami, *satradhikar* of Garmur *satra* (head of the Vaishnavite monastery), also was of this utilitarian view of the wild buffalos.[206] It was in sharp contrast to the planters' recent argument to shield the wild buffalos from the domestic in Kaziranga Game Reserve. Milroy's experiment failed, but resurfaced a decade later. In June 1935, Sarbeswar Barua, a member of the legislative council (MLC), moved a resolution in the Council to protect the wild buffalo.[207] Barua, a Congressman, belonged to North Lakhimpur where wild buffalos were still found and Deb Goswami had an influence in the area. Barua's resolution sought to create buffalo sanctuaries and extend the 'close season' for hunting for the whole year. Besides the appreciation for the wild buffalo of Assam as 'beautiful' and 'fine specimen', Barua's resolution focussed on maintaining a healthy stock of domestic buffalo to support agrarian production. In 1935, the Council passed the resolution. A buffalo sanctuary in Lakhimpur (later named after Milroy) in 1940 was the fruition of Milroy's initiatives.[208] It is noteworthy that in the 1930s, the wild buffalo, rather than rhino were the object of Assamese ecological patriotism.

[205] Milroy, *PRFA 1934-35*, 21; the idea was not novel.

[206] The idea was not novel. As a practice, the peasants used wild buffalo as a feeder to breed their domestic ones. Saikia, *Forests and Ecological History of Assam*, 269.

[207] "Resolution regarding protection to the wild buffalo," *ALCD*, Vol. 15, no. 9, 1 June 1935.

[208] C. Mackarness, *PRFA 1940-41* (Shillong: AGP, 1941), 1, 26.

Secondly, although Milroy was deeply appreciative of strict management of the Kruger and Yellowstone National Park,[209] his policy measures were rooted in the local political and social context. He suggested that wildlife preservation must be taken as such, "the cost involved is not too high …, and … public opinion is not antagonised."[210] Milroy stood out from other Europeans in realizing that the future of wildlife lay in creating a favourable opinion among the Assamese people. It is noteworthy that the Council resolution on the buffalo preservation came from an Assamese politician. He could cross the political and ideological divides for the cause of wildlife. In the annual forest report of 1935, he wrote how he was, "fortunate enough to secure Mr. T. R. Phukan" to accompany him to the All India Conference on wildlife protection in Delhi. Phukan was an Assamese Swarajist and a famous hunter. It is noteworthy given Milroy's ridicule of swaraj.[211] These examples show how wildlife conservation slowly emerged out of a strictly colonial realm and made a base among the Assamese elites. Such alliances became broader in the following years. Around 1940, the FD recruited a 'stockman' as Honorary Forest Officer in the Kaziranga Sanctuary––a position almost invariably reserved for the Europeans. The Conservator of Forests was delighted that the decision "produced good results" in protecting the rhino.[212]

Thirdly, Milroy was one of the earliest forest officials to articulate a shift from sports-hunting to aesthetic appreciation of wildlife using a camera. In 1916, Milroy wrote, "all over the world the rifle is giving place to the camera as the stalker's weapon, and we are now waiting to welcome the photographer to our Sanctuaries."[213] Elesewhere in British India, forest officials like F. W. Champion championed the transition from guns to the camera in the

[209] Milroy, *Note on Game Preservation in Assam*, 7.

[210] Milroy, *PRFA 1934-35*, 18-21.

[211] Milroy explained that the defiance of the game laws in Manas was due to "premature ideas regarding the arrival of swaraj". Milroy, "Game preservation in Assam", 32; however, officially, the Congress leadership in Assam did not call for forest *satyagraha*. Sarkar, *Modern India*, 259.

[212] Mackarness, *PRFA 1940-41*, 26.

[213] Milroy, "The North Kamrup Game Reserve", 464.

1920s.[214] Milroy did not live long enough to see this realising in the Assam sanctuaries. In 1938, the FD opened the sanctuaries to general visitors[215] and in the following year began to export rhinos to various zoos worldwide.[216] A new enthusiasm filled the FD about its rich possession of rhino (Figure 2.5). Within a decade, the sanctuary became an important address.[217]

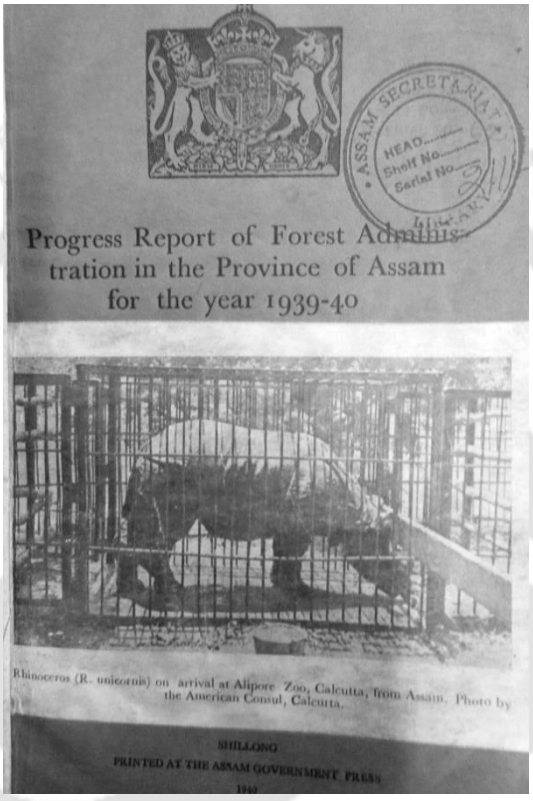


Figure 2.5: A rhino on its way to the US replaces the plain cover page of the forest report, 1939-40. Source: C. Mackarness, *PRFA* (Shillong: AGP, 1940), cover page.

Milroy's pragmatic policy of allowing limited grazing—in lieu of graziers' support to keep the illegal hunters away—created room for protracted conflicts. The decision came at a time when the rhino killing threatened to wipe out the rhinos, and yet the government was

[214] Rangarajan, *The Oxford Anthology of Indian Wildlife. Volume II: Watching and Conserving*, 74.

[215] Saikia, "The Kaziranga National Park", 2009. Also, see Gazette Notification no. 2594-G. J., 1 May 1939 and 1623 G. S. 2 June 1939, Government of Assam.

[216] Miri, "Note on the rhinoceros captured during last October for the American Zoo", 207-210.

[217] In 1951, R. G. Vaghaiwalla, the census superintendent, wrote, "Sibsagar Division can boast of containing the world famous Kaziranga Wild Life Sanctuary". Vaghaiwalla, *District Census Handbook, Sibsagar*, vi.

unwilling to spend in recruiting guards. Soon, the FD and Darrang revenue officials bitterly fought over taxing the graziers in the blurred administrative jurisdiction of transient *tapu*s.[218] The higher authorities mediated and allowed the FD to tax the graziers. FD's financial precarity best explains why the lower-rung forest officials vied for grazing tax.[219] In an environment of growing tolerance towards grazing within the FD, its officials—even if momentarily—overcame the baggage that domestic livestock injured the wildlife.[220] These changes in the 1930s and 1940s paved for enduring conflict around grazing after the independence.

Conclusion

Rhinoceros preservation in Assam began with a deferential role to colonial agrarian expansion. In creating Game Reserves, the colonial government made every effort to remove any obstacle to prospective cultivation. Unlike the colonial officials' view of waste, the low-lying, annually flooded area in Kaziranga was an agro-ecological mosaic. The coming of a Game Reserve in seemingly *terra incognita* gave rise to a fresh set of contestations involving the cultivators, graziers, and planters. The European planters emerged as the most vocal proponents of game preservation in Assam. They rehearsed the usual European disdain of the day against native hunting. With their social and political network, they successfully drove out the graziers from the Kaziranga Game Reserve's surroundings. However, they failed in

[218] Since the tapus where the graziers kept their buffalos came under the Darrang district, its revenue department taxed the graziers. In 1940, the FD claimed that since the buffalos crossed the streams to graze in the sanctuary, they were the legitimate recipients of the grazing tax. From the DCF, Sibsagar Division to the CF, 19 March 1940 (A/147), Collection VIII, file no. 119, 1940, Revenue (AV), ASA; from DC, Darrang to the DFO, Sibsagar Division, 10 June 1940, ibid.

[219] The FD's surplus went down from Rs. 16.35 lakh in 1928-29 to Rs. 1.31 lakh in 1930-31. C. G. M. Mackarness, *PRFA 1938-39* (Shillong: AGP, 1939), 18; tts surplus hardly regained the pre-depression level until the Second World War started (16.13 lakh in 1941-42). H. P. Smith, *PRFA 1944-45* (Shillong, AGP, 1947), 15.

[220] Annual forest report read, "Moderate grazing is a distinct aid to Sal regeneration in keeping down the weeds and thatch." Mackarness, *PRFA 1940-41*, 33; for a detailed discussion on the issue, see Saikia, "Making Room Inside Forests".

winning sporting concessions in reserve. Instead, they strengthened FD's control over the Game Reserves.

The expansion of the Game Reserve in Kaziranga removed the cultivators and graziers, obstructed their future cultivation, and became unpopular. More importantly, the Game Reserve's successive expansions raised complicated questions related to 'improvement' of the province. The Kaziranga environs not only served as an agrarian frontier but also the agrarian core's constitutive other. The Game Reserve and its subsequent expansion unsettled such colonial agrarian policy. In other words, in creating room for wildlife preservation, the government had to compromise with its lopsided emphasis on cultivation in the early years.

The rapid expansion of cultivation and increasing popular support for self-rule carried threats to the idea of wildlife sanctuaries. Rapid agrarian expansion and onslaught on the rhino amid political unrest from the late 1920s raised critical questions about the sanctuaries' future. The Laokhowa Game Reserve came under such pressure from cultivators that Milroy declared, "there is no future for it as a sanctuary."[221] However, the looming threats also worked the other way round. The impossibility to preserve wildlife outside the sanctuaries provided a solid case to safeguard and rethink the future of the sanctuaries.[222] The 1930s saw stricter game laws, new enthusiasm within the FD, and a widening social base for wildlife conservation.

This chapter helped us to understand the complexities around wildlife preservation in the colonial years. It located the origin and consolidation of today's national park in Kaziranga in the Brahmaputra valley's historical agrarian changes. Multiple actors and interests interacted in complex ways in seemingly uninhabited and fluctuating Kaziranga

[221] Milroy, *Note on Game Preservation in Assam*, 3.

[222] Milroy, *PRFA 1930-31*, 5.

environs. Bureaucratic disunity, political climate, and a single officer's commitments (Milroy), all played out in the early days of the KNP. Peasant resistance, agrarian expansion, and floodplain fluidities ensured that the FD made some concessions to the graziers and peasants in the sanctuary's periphery. The sanctuary carried forth a range of such concessions into the years after Independence. At Independence, the Kaziranga Sanctuary was 425 sq. km, surrounded by nearly 45,000 people.[223] The next chapter will discuss how the agrarian, ecological and political changes interacted with the efforts to reinvent nature in independent India.

[223] The Population of the *mauzas*, Kaziranga, Bokakhat (Sibsagar district), Duar Bagori (Nowgong district) and Duar Bagori (United Mikir & Cachar Hills district) is considered. For Nowgong district, population of only Burapahar, Kuthori and Amguri Tea Estates in the neighbourhood of the sanctuary are considered. R. B. Vaghaiwalla, ed. *District Census Handbook (DCHB): Sibsagar, Assam, 1951* (n.d.), 1-5; R. B. Vaghaiwalla, ed. *DCHB: Nowgong, Assam, 1951* (n.d.), 18-19; R. B. Vaghaiwalla, ed. *DCHB: United Mikir & Cachar Hills, Assam, 1951* (n.d.), 24.

Chapter 3: Contesting Conservation (1948-1974)

> We are emphatic that it is absolutely imperative to stop this grazing completely and *without delay*. It is realized that steps in this direction are bound to meet with considerable opposition from a section of people. However, if it is the serious intention of the Government to safeguard the continued existence of this fast-vanishing species (so ruthlessly persecuted in the past for its commercial possibilities) no half measures will work, and government *must* be prepared to face a certain amount of ephemeral unpopularity. Such unpopularity will be more than counterbalanced by the gratitude they will earn from the posterity, and by general approbation and moral support they will receive not only from all right-thinking people in this country but from international scientific bodies such as Unesco [*sic*] who are watching the position with keen interest and deep concern.[1]
>
> Excerpt from Salim Ali's report on Kaziranga Wildlife Sanctuary, 1950

Introduction

The Government of Assam opened the sanctuaries to visitors in 1938. In the following years, politicians, planters, and naturalists visited various sanctuaries.[2] In November 1938, the FD sold one rhino to the National Zoological Park, Washington DC.[3] Though the FD received more demand for rhino, the Second World War considerably stalled the supply. The second rhino began its journey from Assam in 1940, but as the War upset the shipping, it waited for five years at the Alipore Zoo, Calcutta. In December 1944, the rhino was finally shipped to the USA.[4] However, there is no record to suggest that the rhino made it to the destination. Northeast India was a vital front of the War.[5] Forest officials complained that the American

[1] Ali, "The Great Indian One-Horned Rhinoceros in Assam Province in India". Emphasis in original.

[2] In 1940-41, the Kaziranga Sanctuary collected Rs. 215 from the visitors. Mackarness, *PRFA 1940-41*, 29.

[3] Miri, "Note on the rhinoceros captured".

[4] From War Shipping Administration to National Zoological Park, Washington D. C., 15 February 1945, "Indian Rhino, II, 1944-46", Box 159, RU 74, SIA.

[5] In 1942, nearly six lakh soldiers from all over the world thronged the region. Bérénice Guyot-Réchard, "When Legions Thunder Past: The Second World War and India's Northeastern Frontier," *War in History* 25, no. 3 (2017): 8.

soldiers trespassed and hunted in the sanctuaries and RFs in Assam.[6] However, the War also improved travel on the Assam Trunk Road.[7] After the War, there was renewed enthusiasm in visiting the Kaziranga Sanctuary.[8] Visit of the Governor or Ministers became almost an annual routine in the sanctuaries.[9] The FD resumed exporting rhinos to various foreign zoos. In 1950, the Government of Assam renamed the game sanctuaries as Wild Life Sanctuaries. The word 'game' referred to the birds and animals worthy of shooting, but 'wild life' included all life forms and conservation.[10]

Similarly, there was enthusiasm in the national leadership, especially Jawaharlal Nehru, the first Prime Minister of India to conserve wildlife.[11] In 1952, the Government of India constituted the Central Board of Wildlife (later renamed as the Indian Board for Wild Life (IBWL)). No such body existed during the colonial rule to lead wildlife conservation. The Maharaja of Mysore headed the IBWL, and erstwhile princely state rulers, European planters, naturalists, and forest officials were its members. E. P. Gee, a planter-turned-naturalist, who went on to have a long association with the Kaziranga Sanctuary, was its office bearer since inception. Drawing from the international discourse on wildlife protection, the IBWL defined the 'national' standards for sanctuaries and national parks. The IBWL functioned under the Union government of India. However, the Indian Constitution listed 'Forest' and 'Protection of Birds and Wild Animals' in the State List.[12] In other words, the

[6] Smith, *PRFA 1944-45*, 21; one of the important transit camps was in Rajabari, 15 km east of the Kaziranga Sanctuary, Interview with Tankeswar Hazarika, Rajabari, 10 May 2018.

[7] Deepali Barua, *Urban History of India: A Case Study* (New Delhi: Mittal Publications, 1994), 81.

[8] In 1945-46, 192 visitors came to the Kaziranga Sanctuary. J. B. Rowntree, *PRFA 1945-46* (Shillong, AGP, 1948), 22.

[9] P. D. Stracey, *PRFA 1949-50* (Shillong: AGP, 1957), 27.

[10] Saikia, "The Kaziranga National Park", 122.

[11] Nehru acted on the SPFE's call to protect the Junagarh lions from extinction. Rangarajan, *Nature and Nation*, 110.

[12] The state governments deal with the subjects under the State List, and the union deals with the subjects under the Union List.

state governments had a mandate over wildlife, whereas the union had only an advisory role. The IBWL repeatedly cast doubts over the state government's intention and ability to protect wildlife. In their view, the only recourse to protect the natural heritage was through uniform legislation and giving the Union government a more significant say on wildlife matters. In the 1970s, the Union government enacted the Wildlife (Protection) Act 1972 overriding the constitutional mandate. In 1976, it also transferred wildlife from the State List to the Concurrent List.[13] Central to the two-decade-long tussle were the competing approaches to conservation in celebrated sanctuaries like the Kaziranga Wildlife Sanctuary (KWS). However, this power struggle over nature's governance in independent India is an understudied area.

Works on wildlife conservation in the post-independent India focus heavily on the charismatic mega-faunas like the lion[14] and tiger[15]; and the (auto)biographies of the influential natural historians and political personas[16]. National parks and wildlife sanctuaries are not just about charismatic species. Smaller and less charismatic animals and plants shape their career too. With a few exceptions, the agro-ecological dimensions are largely missing in the scholarship about parks and sanctuaries.[17] Parks and sanctuaries are not a part of an inert ecological setting. Instead, they belong to constantly changing ecological and agrarian surroundings. Expanding frontiers of cultivation erode their buffers, mining and dams affect their ecology, and timber logging changes the habitat. The ideas of wildlife conservation met with these changing conditions in most wildlife sanctuaries and, to be sure, in the KWS.

[13] The State and Union government, both deal with the subjects under the Concurrent List, but the latter's view would prevail in case of divergence.

[14] Rangarajan, "Animals with Rich Histories," 109-127; Divyabhanusinh, *The Lions of India* (Ranikhet: Permanent Black, 2008).

[15] Kailash Sankhala, *Tiger! The Story* of the *Indian Tiger* (New York: Simon & Schuster, 1977).

[16] Rangarajan, *Nature and Nation*, chapters 5-7; Jairam Ramesh, *Indira Gandhi: A Life in Nature* (New Delhi: Simon & Schuster, 2017); Ranjitsinh, *A Life With Wildlife*.

[17] For exceptions, see Chhatre and Saberwal, *Democratizing Nature*, 2006; Rangarajan, *Nature and Nation*, 86-142; Middleton, "Ecology and Objective Based Management".

This chapter shows various layers of opposition to the ideas and practices of conservation in the KWS. The chapter is divided into three sections. The first section discusses IBWL's shifting ideological positions and practices in managing India's wildlife in the 1950s and 1960s. The IBWL began with an approach that allowed prudent resource use in the sanctuaries. However, in practice, they tried to convert sanctuaries into landscapes for aesthetic consumption alone, free from all kinds of human use. Cultural ideas about pristine nature instead of science and reason drove their practices. They saw *graziers and livestock* rather than *grazing* as wildlife's enemies. The political leadership of Assam either shared very little or remained wary of IBWL's attempts. Instead, as the second section discusses, the KWS's journey was rooted in the ecological volatilities, post-independence politics of Assam, and bureaucratic conveniences. The changing courses of the river and administrative needs meant that graziers had a lingering presence in the KWS, much against the conservationists' wishes. Also, flood and erosion drove hundreds of cultivators to settle in the sanctuary's buffer, complicating the conflicts. Assam's political leadership was opposed to put wildlife conservation above agrarian concerns. Similarly, the FD saw allowing some graziers in the sanctuary's periphery useful to earn their loyalty towards conservation. The third section shows how despite the rhino being the KNP's flagship animal, everyday tussles in the KWS were around deer and fish. The clashes were rooted in the agrarian changes, rural poverty, and locally ascribed meaning of crime and resources. The chapter concludes that the KWS in the early 1970s looked similar to the IBWL's outline. However, it followed a different path from the IBWL's instruction, one forced by the ecological and agrarian changes and rhino's rising cultural, economic, and political value.

Nationalising Nature and its Discontents

Assam's new political leadership was concerned about the rare rhino and the KWS.[18] In 1948, Akbar Haydari, the Governor of Assam, invited the Bombay Natural History Society (BNHS) to report on Assam's sanctuaries.[19] Its new secretary Salim Ali (1896–1897), invited his American ornithological associate, Sidney Dillon Ripley (1913–2001). In March 1949, the duo visited almost all the sanctuaries in Assam.[20] They estimated the rhino population, and assessed the habitats and their management. They projected that the Assam sanctuaries had 53–200 rhinos and the KWS 24–100. Against the forest officials' speculation of 500–600 rhinos, Ali's conservative estimate was to avoid "unwarranted complacency as regard to the position of the species." Their report was very critical of the domestic livestock allowed in the parts of the KWS. Predicting a bleak future for the wildlife in an electoral democracy that India would become, they urged the ruling elites to set their priorities right (epigraph).

Ali and Ripley's visit had notable imports on the KWS and BNHS. Their visit stamped the KWS as the undisputed showstopper among the sanctuaries in Assam. They held that Manas Sanctuary—slightly larger than the Kaziranga Sanctuary—had only two rhinos. Besides, Ali believed that the government could downsize the Manas Sanctuary to a manageable area. C. G. Baron, a planter who knew Manas for several years, vehemently opposed Ali's findings.[21] Ali and Ripley visited Manas Sanctuary in the driest month of March. Baron argued that most rhinos migrated to the Bhutan hills during the dry months and

[18] Omeo Kumar Das (1895-1975), a Congressman and minister, raised concerns before the Premier and Forest Minister about illegal fishing and hunting in the KWS. The Premier noted that "these are serious charges." See Das's note to the FM, 24 March 1949, reproduced in file no. For/70/55, 1955, Forest, ASA.

[19] Salim Ali, *Fall of a Sparrow* (Bombay: Oxford University Press, 1985), 189; P. D. Stracey, *PRFA 1947-48* (Shillong, AGP, 1953), 19.

[20] Ali, "The Great Indian One-Horned Rhinoceros in Assam Province in India".

[21] It was entirely Ali's thinking that went into the report, as evident from his letters to Ripley. From Ali to Ripley, 21 May 1949; 'Ali, Salim 1947-56', Accn. no. 92-063, Box 1, RU 7008, S. Dillon Ripley Papers (henceforth, SDR Papers), SIA; Ali to Baron, 21 May 1949, ibid.

returned in the monsoon when the grass was abundant. Ali did not relent, and as the things unfolded subsequently, the KWS came of age of the 1930s' obscurity when Manas received tremendous government attention.[22] In the 1950s, the Government of Assam embarked into an ambitious program (tourist lodges, amenities and advertisements) of making the KWS tourists-friendly.

Figure 3.1: An advertisement by the Government of Assam outside the Calcutta Airport, circa, 1952. Source: File no. For/70/55, 1955, Forest, ASA.

For the BNHS, the Assam experience was a moment of transition from their mastery over birds to large mammals. Six British and two Indian naturalists established the BNHS in 1883. In the next few decades, BNHS became a leading institution on the natural history of South Asia. After independence, the British officials abruptly deserted the BNHS leaving it to

[22] The KWS also had the advantage of improved communication on the Assam Trunk Road, which made it more accessible than other sanctuaries. For the government's attention on Manas Sanctuary in the 1930s, see chapter 2.

the Indian protégés like Ali.[23] Ali's Assam visit was in this backdrop of changes that helped the BNHS maintain its image. Soon after his visit, the BNHS received an invitation to the International Technical Conference on the Protection of Nature scheduled in the US in August 1949. Initially, Ali requested Sundar Lal Hora of Zoological Survey of India, to move a resolution on Kaziranga Sanctuary. Soon, Ali changed his mind and requested Ripley: "*you* will move the resolution on our behalf".[24] While Hora's resolution would have made it Government of India's effort, Ali's change in mind shows the desire to retain the credit with BNHS. Ripley obliged, and the conference passed the following resolution:

> The International Technical Conference on the Protection of Nature sponsored by the International Union for the Protection Nature, having considered the recommendations of the Bombay Natural History Society Survey, urges the Government of India to request the Provincial Government of Assam, in collaboration with IUPN, to take such steps as may be practicable to protect and preserve the Great Indian One-horned Rhinoceros *(Rhinoceros unicornis),* especially in Kaziranga Sanctuary, which should be set aside as an inviolable Rhinoceros Sanctuary.[25]

Interestingly, while Ali and Ripley visited several sanctuaries, the resolution mentioned only the KWS. Although the Indian delegation was numerically strong, the only 'Indian' cases featured in the conference were the KWS and the Greater One-horned Rhinoceros. The KWS and the rhino made an international presence even before they came to the national limelight. Ali and Ripley's Assam visit put KWS on the world map. Moreover, the conference kept the wildlife and nature protection buzz on in India, where the War had brought significant changes to the wildlife sanctuaries.

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[23] Lewis, *Inventing Global Ecology*, 46-53.

[24] From Ali to Ripley, 13 June 1949, 'Ali, Salim 1947-56', Box 1, Acc. no. 92-063, RU 7008, SDR Papers, SIA, emphasis in original.

[25] Secretariat of the International Union for Protection of Nature, "Proceedings and Papers, Lake Success, 22-29 August 1949," *International Technical Conference on Protection of Nature* (Paris, 1950), 138.

During the War, the Government of Assam allowed commercial fishing in the sanctuaries and trimmed the workforce guarding them.[26] The Indian conservationists representing the IBWL were concerned about timber logging, illegal hunting, fishing, and livestock grazing in the Indian sanctuaries. They had a tricky question to address: to what extent human could interfere in the wildlife sanctuaries? An article by E. P. Gee—written ahead of the IBWL's first session in 1952—captured this dilemma and set the initial tone.[27] Gee ruled out any "cut-and-dried" principle. He rejected both the extreme positions, exploitation of resources and unexploited wilderness. Instead, he proposed an approach that was not adverse to the nation's economic development. While "good sylviculture" could continue, rash "revenue-hunting" must stop. Moreover, every sanctuary must have some core zones where all kinds of extractions should stop. Sanctuaries should exclude livestock grazing wherever "humanly possible". Wherever it was unavoidable, there should be compulsory inoculation. Sanctuaries could export some animals to earn foreign exchange. Gee also rejected the other extreme position of leaving nature to itself. An undisturbed nature (unmanned sanctuary) was vulnerable to the illegal hunters. The dead vegetation and un-removed logs would harm the wildlife, and hence, required active removal or burning. Gee felt fire was essential to regenerate grassland sanctuaries though it killed several smaller species. More importantly, visitors would not be able to see wildlife if the grass was not burnt. After all, Gee and most of his fellow naturalists were big mammal enthusiasts. Given the diversity of the wildlife sanctuaries, he proposed locally pragmatic approaches. However, wherever development clashed with wildlife protection, the latter should prevail. Gee's proposal read the national leadership's mind well. Despite Nehru's love for wildlife, he was clear, "we can't have human beings starving or lacking food because wild animals are

[26] Rowntree, *PRFA 1945-46*, 22.

[27] E. P. Gee, "The Management of India's Wildlife Sanctuaries and National Parks", Manuscript, 1952, file no. 44 (1) Vol. II/52, Ministry of Natural Resources and Scientific Research, Abhilekh Patal, NAI.

destroying it."[28] Gee's approach of not frustrating the developmental goals was politic and palatable to the regional political leadership. Any proposal that threatened the regional states' revenue prospect was to be a non-starter.

The IBWL met for the first time in Mysore in November 1952 to plan the management of India's wildlife. They adopted an approach more or less in line with Gee's proposal. First, it envisioned national parks as 'unimpaired' zones to be preserved for scenic beauty and scientific study. Secondly, the IBWL reinforced the idea of wildlife sanctuaries which would disallow all unauthorised hunting, shooting, and capturing of wildlife. Unlike the national parks, sanctuaries would allow resource extraction. However, a sacrosanct area of 1-25 square miles would be set apart solely for flora and fauna within sanctuaries.[29] Two years later, when the IBWL met in Calcutta, it further absolved the national parks from being free from human intervention.[30] IBWL's support for flexibility implied that the states would decide what suited them best. However, as we will see, the conservationists' support for a flexible character in the wildlife areas upended even before the journey began.

In practice, the IBWL increasingly tried to centralise the wildlife policies. Grazing and fishing was an eyesore to the IBWL office-bearers visiting sanctuaries like the KWS.[31] They held state's electoral politics responsible for allowing the human use of sanctuaries. In 1953, the IBWL recommended the transfer the subject of 'Protection of Wild Animals and Birds' from the State List to the Concurrent List of the Indian Constitution. The issue got

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[28] From Jawaharlal Nehru to the CMs, 16 October 1950, in Jawaharlal Nehru, *Letters to Chief Ministers 1947-64, Vol. 2*, ed. G. Parthasarathy (New Delhi: Jawaharlal Nehru Memorial Fund, 1986), 233-34.

[29] Government of India, *Proceedings of the Inaugural Session of the Indian Board of Wild Life Held at Mysore from 25th November to 1st December 1952* (New Delhi: Government of India, Ministry of Food & Agriculture, 1952).

[30] "Resolutions passed in the Indian Board of Wild Life in its Second Session held at Calcutta from 2nd to 4th February 1955", file no. For/WL/37/55, 1955, Forest (Wildlife), ASA.

[31] K. S. Dharmakumarsinhji and Y. R. Ghorpade, "A Special Note on Kaziranga Sanctuary", 1955, file no. For/WL/224/55, 1955, Forest (Wildlife), ASA.

bundled with the Union government trying to gain a greater say over the forest resources. In 1955, the Union government proposed the transfer of 'Forests' and 'Protection of Wild Animals and Birds' to the Concurrent List. The union argued that it could not divest itself from the management of forests given the national needs—railway, communication, and defence. The Government of Assam declined the proposal fearing Union government's intrusion in the forests, a key source of the state revenue.[32] It felt that this move would reduce the states as the "agent of the central government losing their independent status." It joined Madras, Madhya Pradesh, Hyderabad, and Bombay—with substantial forest and wildlife—in opposing the union proposal. The Government of Assam had a significant stake in independently managing its wild animals. It conducted elephant catching operations to serve two purposes, revenue and crop protection.[33] While Assam still had abundant elephant population, it was rapidly dwindling in the rest of the country. Union legislation could risk either prospects for Assam, revenue and agricultural growth.

Failed to centralise the wildlife matters constitutionally, IBWL took to the creation of national parks as a way to control wildlife policies. The IBWL placed the wildlife bearing areas on a progression path from 'wildlife sanctuary' to 'national park'. The crucial difference between the two was that the former was created through a state government's notification, and the latter through an Act of the state legislature. While a notification could be withdrawn anytime, an Act gave a national park more stability. Otherwise, the national parks were just the 'better' ones like Kaziranga, Gir, and Kanha, among the wildlife

[32] See cabinet memorandum, 31 January 1956 and the FM's comments, file no. For/WL/361/55, 1955, Forest (Wildlife), ASA; The union bid to centralise the control over Assam's mineral resources led to widespread protests (Refinery Movement) from 1956, see Ditee Moni Baruah, "The Refinery Movement in Assam," *Economic and Political Weekly* 46, no. 1 (2011): 63-69.

[33] In 1950-51, the FD earned Rs. 3.31 lakh, 6 per cent of its total revenue from elephant catching. It allowed killing the rogue elephants responsible for crop damage. P. D. Stracey, *PRFA 1950-51* (Shillong, AGP, 1961), ii, 31; E. P. Gee supported catching operation to protect crop, E. P. Gee, "Wild Elephants in Assam," *Oryx*, 1950: 16-22.

sanctuaries. Conservationists asked the states to be selective in upgrading sanctuaries to national parks. Only sanctuaries having rare species in fair numbers and accessible to visitors were eligible.[34] The IBWL wanted a uniform pattern of legislation to maintain "national character" of the national parks.[35] The IBWL wanted to place a Union government's representative in state's wildlife authority to maintain the national character. It drafted a model bill and sent to the states in 1957. The IBWL told the states that they could create 'state parks' but to declare them as national parks they must get its approval. It also directed the states to send their national parks bill before tabling it in the state legislature. By 1961, the states required the IBWL's approval to rename wildlife sanctuaries as national parks.[36]

For the IBWL, upgrading a sanctuary to a national park essentially hinged on whether the former satisfied a specific cultural view of nature. According to this view, nature should cater only to its aesthetic consumption, and it can exist only where there is no human intervention.[37] In Gee's words, "the very presence of domestic animals at the centre or show-place of a sanctuary, where a visitor expects to see wild life, is veritable eyesore."[38] In support of the removal of grazing, Gee and his fellow conservationists alleged that domestic cattle were a source of disease and the death of wild animals. Therefore, intensity of livestock grazing was a vital basis for a sanctuary to be upgraded to a national park.[39] The IBWL officials visiting the KWS saw it "on its way to become" India's foremost national park if it

[34] E. P. Gee, "The Management of India's Wildlife Sanctuaries and National Parks, Part II," *JBNHS* 52, no. 4 (1955): 731.

[35] "Resolutions passed in the Indian Board of Wild Life in its Second Session held at Calcutta from 2nd to 4th February 1955", file no. For/WL/37/55, 1955, Forest (Wildlife), ASA.

[36] E. P. Gee, "The Management of India's Wild Life Sanctuaries and National Parks - Part IV," *JBNHS* 59, no. 2 (1962): 460-463.

[37] See Neumann, *Imposing Wilderness*, 20-21, for a discussion in the Tanzanian context.

[38] Gee, "Management of India's Wildlife Sanctuaries," 727-728.

[39] The Kanha National Park, the first national park established after the independence in 1955, was "relatively undisturbed". Schaller, *The Deer and the Tiger*, 8.

could control livestock grazing.[40] If removal of domestic cattle was impossible, the key was in regulation.[41]

Let us now look at how the Government of Assam responded to the IBWL's wildlife management policies. There were fears that the Greater One-horned Rhinoceros might extinct like two other species of rhinoceros from the region. P. D. Stracey (1906-1977), the topmost forest official in Assam and a keen wildlife enthusiast, saw its future in resisting the rapidly advancing agrarian frontiers towards the KWS.[42] Livestock grazing in the KWS was one of the most vexed issues to the FD.[43] In Ali and Ripley's observations, Stracey got significant support to minimise human interference in the KWS. Stracey was successful in restricting grazing in the KWS with some success. However, with his disapproval of fishing in the KWS, Stracey came into direct conflict with the Forest Minister Ramnath Das.[44] We will return later to the discussion on grazing and fishing in greater detail. Meanwhile, Stracey left for the Forest Research Institute, Dehradun, in February 1955. He reminisced that under Das, his life had become "intolerable".[45] We don't know if Stracey's stand on the KWS was central to the conflict.

Stracey's successors were more congenial to the priorities of the state's political leadership. After independence, landlessness and food production were pressing issues for the

[40] Dharmakumarsinhji and Ghorpade, "A Special Note on Kaziranga Sanctuary", 1955, file no. For/WL/224/55, 1955, Forest (Wildlife), ASA.

[41] Gee, "The Management of India's Wildlife Sanctuaries and National Parks, Part III," 9-10.

[42] The other two species, Javan Rhinoceros (*Rhinoceros sondaicus*) and Sumatran Rhinoceros (*Dicerorhinus sumatrensis*), found in the north-eastern India vanished by the 1940s. P. D. Stracey, "The vanishing rhinoceros and Assam's wild life sanctuaries," *Indian Forester* 75 (1949): 472.

[43] Rajendra Nath Barua, MLA's assembly questions in the Assam Legislative Assembly (ALA), *Assam Legislative Assembly Debates* (henceforth *ALAD*), 27 March 1950, 610-11.

[44] From the CF to the Secretary, FD, 11 May 1953 (no. C-231) and FM's notes pp. 14-15, file no. For/70/55, 1955, Forest, ASA.

[45] P. D. Stracey, *Nagaland Nightmare* (Bombay, New York: Applied Publishers, 1968), 79.

Government of Assam.[46] Therefore, it assessed several of IBWL's policies against these priorities. For instance, there was a pasture outside the KWS's main entrance. Rhinos regularly grazed here beside domestic livestock. Dharmakumarsinhji, the vice-chairman of IBWL, after his KWS visit, recommended adding this area to the sanctuary. Stracey's successor replied, "… it is impossible to deprive villagers of their fields, just because rhinos come out to their fields in the rainy season."[47] The Government of Assam declined the IBWL's suggestion to seize crop protection guns around the sanctuaries. It said, "…it is much more important that the crops raised by the people also are given protection particularly in the days of food scarcity."[48] The IBWL pressed the states to establish a separate wildlife preservation department. It involved financial commitment for the state government, and it happened only in 1966-67.[49] The leadership in Assam was least inclined to have a Union government representative in the national park management authority. The conservator argued that "this will tie the hands of the state legislature".[50] The Government of Assam disagreed with the IBWL in every matter that challenged its federal freedom.

Defending its freedom did not mean that the Government of Assam was frozen in time in its outlook towards wildlife. Instead, it was ahead of the time in appreciating other life forms like the tiger. Indian forest officials prized tiger hunt, and shikar companies ran tiger hunt business well into the 1960s.[51] In KWS, forest officials realized that tigers preyed on rhino calves in the KWS and it was deliberated if any action against the predator was needed.

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[46] Arupjyoti Saikia, *A Century of Protests: Peasant Politics in Assam Since 1900* (New Delhi: Routledge, 2014), 21-72.

[47] From Senior CF, Assam to the Secretary, IBWL, 5 April 1955, file no. For/WL/224/55, 1955, Forest (Wildlife), ASA.

[48] Although the FD wanted to restrict guns around the sanctuaries, the Government of Assam overrode the suggestion. From CF to Secretary, FD, 7 November 1958; From Secretary, FD to Secretary, IBWL, 23 June 1958, file no. For/WL/368/58, 1958, Forest, ASA.

[49] Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal", 524.

[50] From CF to the Secretary, FD, 18 April 1955 (no. b.487), file no. For/WL/37/55, 1955, Forest, ASA.

[51] Rangarajan, *India's Wildlife History*, 94–107.

In 1960, the Forest Minister concurred with the Conservator of Forests who sought, "a policy of non-interference with the processes of nature and not to make any attempt to destroy the tiger in the sanctuary".[52] Far from seen as marauders, tigers were now "constituting an added attraction to the sanctuary." Such appreciation went a long way in creating a significant tiger population by the end of the twentieth century in KNP. We will return to the KNP's tiger story in next chapter. Meanwhile, the conservationists in the IBWL saw a gloomy future for India's wildlife and took recourse in science.

In the early 1960s, there was growing anxiety in the conservationist circle about the fate of big mammals. The extinction of the Indian Cheetah was a cautionary tale. They felt that the wildlife suffered due to the lack of a dedicated wildlife service in most states, and the forest officials' apathy.[53] This frustration was not about the KWS, which was still considered a stalwart among the sanctuaries. Instead, they resented the state forest departments' aversion to treat wildlife as their integral responsibility. Since S. H. Prater's *Book of Indian Animals* (1948), Dharmakumarsinhji's *A Field Guide to Big Game Census*, was the probably only substantial work in understanding the Indian mammals.[54] In 1955, the IUCN expressed the possibility of sponsoring ecological research in the KWS. However, the Forest Minister of Assam appeared keener that the IUCN publicised the KWS's modern tourist facilities abroad.[55] The BNHS's expertise was limited to the birds. While generating knowledge about wildlife ecology was acutely felt, neither financial resources nor experts were available.[56] Gee and Ali both attended the First World Conference on National Parks held in Seattle,

[52] From CF to the Secretary, FD, 6 December 1960, file no. For/WL/588/60, 1960, Forest (Wildlife), ASA; for minister's concurrence, see his notes on p. 2, ibid; efforts in tiger conservation began only from the late 1960s, see Sankhala, *Tiger!*.

[53] The BNHS and its journal were the leading advocates. "Editorial", *JBNHS*, Vol. 63 No 3, 1966: 489-90.

[54] K. S. Dharmakumarsinhji, *A Field Guide to Big Game Census*, Leaflet No. 2 (New Delhi: Indian Board for Wildlife, 1959).

[55] From the Secretary, FD to M. C. Bloemers, Acting Secretary-General, IUCN, Brussels, 6 January 1955, file no. For/WL/37/55, 1955, Forest, ASA.

[56] Lewis, *Inventing Global Ecology*, 56.

USA, in 1962.[57] The newly established World Wildlife Fund for Nature (WWF) announced to fund wildlife work for endangered species. Gee was precisely looking for it. The KWS and Gir Forest Sanctuary featured reasonably well in the conference to merit such attention. In 1962, the WWF approved an ecological study of the rhino in the KWS. The funds were available in 1965. Gee recruited J. Juan Spillett, an American graduate student researching rodents in India, to survey several wildlife sanctuaries in Assam, North Bengal, and Nepal.[58]

Despite some preliminary work on large mammal census by Indian ecologists,[59] the Indian expertise on the area was presumed to be absent. Influential people in the government took the foreign ecologists more seriously as compared to the Indian.[60] Gee got Spillett to do the job to overcome this hurdle. The *Journal of the Bombay Natural History Society* devoted an entire issue to publish Spillett's study.[61] The study included the status of *Rhinoceros unicornis* besides population of various species, habitat health, and challenges. The report stood out in unleashing a war against livestock grazing. It noted, "overgrazing by domestic livestock is like cancer". Spillett reminded, "… India already has the notoriety of having created the largest man-made desert in the world." He argued that livestock threatened wildlife by competing for forage, transmitting disease, and bringing human disturbances. Spillett found that the FD allowed 49 professional graziers and 56 villagers along the northern and southern boundaries, respectively. He doubted whether the loyalty of these graziers to the FD "offset the deleterious effects of livestock grazing." He recommended a complete ban on all livestock inside the sanctuary. Historian Michael Lewis classifies Spillett's study as 'normal science', "the necessary working through of the details sketched

[57] Adams, Alexander B. *First World Conference on National Parks.* Washington, D.C.,: National Park Service, United States Department of the Interior, 1962.

[58] Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal", 492-93, 557-72; for details on Spillett's transition from rodents to big mammals, see Lewis, *Inventing Global Ecology,* 64-66.

[59] Dharmakumarsinhji, *A Field Guide to Big Game Census*.

[60] Lewis, *Inventing Global Ecology*, 57-58.

[61] Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal", 1966.

out by larger paradigms or theories", as opposed to anything that exceeds the established paradigms.[62] Nonetheless, as Lewis puts, "He was a graduate student writing on behalf of the BNHS, lending his American citizenship and training to their crusade."[63] Even the normal science gave the conservationists' discomfort against the graziers a scientific imprint. We will return to the effects of Spillett's study while discussing grazing. Meanwhile, let us assess his findings and conclusions.

Spillett animated his report with the theory that excessive grazing led to desertification. Research debunked the theory in the 1930s.[64] Spillett's conclusions about the evils of grazing in the KWS differed from his observations. First, he concluded that wildlife had a thin presence in the areas where the livestock grazed. He divided the sanctuary into 33 compartments for the census. No rhino was reported in 8 of the 33 census compartments. Similarly, 20 compartments had no elephant, 19 had no sambar, 18 had no swamp deer, and 13 had no wild buffalo. Not all these areas had livestock presence. Spillett had no answers as to why there was no wildlife where the livestock did not graze. In contrast, smaller animals like the hog deer were everywhere except in two compartments. Previous visitors like Lee M. Talbot, an IUCN ecologist (visited KWS in 1955), noted how several rhinos grazed beside domestic cattle at Kohora Grazing bordering the sanctuary.[65] While Spillett cited Talbot's report in his study, he did not indicate any change in such observations a decade later. The Baguri block, which had the highest rhinos (two-fifths), was not free from livestock grazing.

[62] Lewis, *Inventing Global Ecology*, 63.

[63] Lewis, *Inventing Global Ecology*, 206.

[64] For a discussion, see Saberwal, *Pastoral Politics*, 113-141.

[65] Talbot, "A Look at Threatened Species", 201; Gee also made similar observations. From E. P. Gee to FM, 20 August 1953, file no. RSG-92/50, 1950, Revenue, ASA.

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Spillett's conclusion that wildlife concentration was adversely related to livestock did not follow from his observations.[66]

Secondly, Spillett understood that livestock grazing along the sanctuary's southern boundary was allowed since 1950 due to the political expediencies opened by the new democracy. In reality, as discussed in chapter 2, the colonial government allowed villagers to graze since 1925 though there were some interruptions in the mid-1930s late 1940s. The initial aim was to keep a mile strip clear of dense growth along the KWS's southern boundary through intensive grazing. It was to deter the wild animals from crossing over to the crop fields.[67] Spillett uncritically shared conservationists' discomfort about India's democratic governments being soft on livestock grazing. Spillett did not give any experimental details if grazing reduced forage for any species of wildlife. The few weeks he spent in each sanctuary were not enough to carefully study these aspects. Instead of scientific consistency, Spillett's conclusions on grazing followed from the Anglo-American aesthetics of wilderness that privileged an idyllic swathe void of human presence. His views on the perils of grazing followed from his study in the Rocky Mountains in the US.[68] His report dealt considerably with the tourism amenities in the KWS and ways to improve those. To make the KWS an attractive tourist destination, Spillett echoed Ali and Gee, "… visitors to Kaziranga are not willing to pay … for the opportunity of seeing domestic livestock or grass cutters inside the sanctuary."[69] Establishing that grazing or fishing was ecologically harmful to wildlife conservation was more time-consuming and rigorous than Spillett undertook. Proscribing the grazier or fisher was much easier under the semblance of science.

[66] Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal", 518.

[67] From DCF to the DC, Sibsagar, 3 March 1925 (no. B-468), file no. X-28, 1925, Revenue, ASA.

[68] Lewis, *Inventing Global Ecology*, 65-66.

[69] Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal", 521.

Despite these limitations, Spillett's study was a noteworthy departure in Indian wildlife conservation. It put to rest lingering doubts about the rhino population in the KWS. He gave a narrower bracket of 366–400 rhinos than Ali and Ripley's 24–100 seventeen years ago. The survey conveyed confidence that many years of protection has revived the rhino population. Secondly, it rigorously involved the KWS officials in the census. Since Spillett's census, FD conducted a regular census every six years until 1999.[70] From 2000, FD conducts rhino census every three years.[71] Thirdly, wildlife census became a powerful strategy to highlight rapidly dwindling numbers of unprotected animals like the tiger.[72] Gee had firm faith on census strategy even if his numbers were far from accurate. He reportedly said, "Some estimate is better than none, and it should hold good until it is improved."[73] Gee's strategy caused a stir at the highest level in the Government of India to launch Protect Tiger.

In the late 1960s, the KWS stood close to what the conservationists envisioned as 'national' in the national park. The KWS increasingly restricted peasants from fishing, grazing, and thatch cutting. What changed from the 1950s to the 1960s for the leadership in Assam to introduce these changes? Did Gee's and Spillett's efforts bear fruits? The following section will show that ecological changes in the Kaziranga environs and rhino's growing political, economic, and cultural value fuelled these changes.

Sanctuary in an Agrarian World

Chapter 2 discussed that the Kaziranga environs stood at the horizon of the agrarian expansion in the Brahmaputra Valley. By the 1940s, the land began to exhaust even in these

[70] For the first one after Spillett's, see P. Lahan, and R. Sonowal, "Kaziranga Wildlife Sanctuary, Assam: A Brief Description and Report of the Census of Large Animals (March 1972)," *JBNHS* 70, no. 2 (1973): 245-78.

[71] M. S. Yadava, "Detailed Report on Issues and Possible Solutions for Long Term Protection of The Greater One Horned Rhinoceros in Kaziranga National Park Pursuant to the Order of The Hon'ble Gauhati High Court," Kaziranga National Park, 2014, 112-113.

[72] Sankhala, *Tiger!*, 174-75.

[73] Sankhala, *Tiger!*, 174.

areas, which were unattractive a couple of decades ago. Secondly, the 1950 earthquake significantly changed the character of the Brahmaputra. The river began to carry more sediment, its bed rose, and flood and erosion became fierce.[74] Such shifts had a disastrous impact on the riparian agro-ecology in the Kaziranga environs. Although the Government of Assam declined the union interference in its wildlife management, it was keen to afford greater protection for the rhino. The emerging ideas of wildlife conservation that privileged reducing human pressure, creating buffers, and animal corridors competed with several complex issues in the Kaziranga environs. This section discusses how the lack of cultivable land and the ecological turmoil in the peripheral areas created grounds for enduring challenges to the rhino conservation initiatives.

We will begin with the creation of the animal corridor. In May 1949, the Premier of Assam, along with his ministers, visited the KWS. Their tour note suggested creating a corridor between the sanctuary and the Karbi Hills to give wildlife a safe passage to highlands during the floods. The FD proposed to acquire 1,670 acre in Haladhibari, which had fallow tea estate land, a village, permanent and *jhum* cultivation, and pastures.[75] The local revenue officials realised that if the entire proposed land was acquired, there was no available land to resettle the villagers. They reduced the cultivated land from the proposal "so that the villagers may be least affected". The reduced area stood at 970 acres and narrowed

[74] Arupjyoti Saikia, "Earthquakes and the Environmental Transformation of a Floodplain Landscape: The Brahmaputra Valley and the Earthquakes of 1897 and 1950," *Environment and History* 26 (2020): 51-77.

[75] There was a 400-acre pasture adjoining the sanctuary's south-western boundary. The Karbis practised *jhum* in the hills farther south. The proposal included 200 acres of pasture, 110 acre of tea estate, 80 acre of periodic *patta*, 70 acres of annual *patta*, 370 acres of government land, and 830 acres of hills under *jhum* (figures rounded to 10s). The periodic *patta*s were issued for 30 years, and annual *pattas* are renewed every year. The former means more secured rights for the patta-holder, and the government has to pay compensation to acquire the land. From the SDC, Dergaon to the SDO, Golaghat, 4 January 1951 (no. 892R), file no. RSG/92/1950, 1950, Revenue, ASA.

Figure 3.2: A portion of a map showing the KWS and its surroundings, 1954. The dots ringing the sanctuary boundary shows eroding buffers and narrowing animal passages to the hills. Source: based on Jorhat, U 502, original map prepared by Army Map Service, Corps of Engineers, US Army, Washington DC, compiled in 1954 from India, 1:126,720, Survey of India, editions, 1915-45.

the corridor from 3.5 KM to 2 KM.[76] The bulk of the land reworked for inclusion was the government land, pasture, and uncultivated tea garden. Despite the issuance of the final notification, the revenue department did not hand over the land to the sanctuary. However, the FD persisted. Finally, in 1967, a corridor was created in 151 acres, less than one-tenth of the initially proposed.[77] Nevertheless, possibly, it was the first wildlife corridor in India. A couple of years later, landless cultivators from the KWS's eastern neighbourhood occupied the remaining areas. The land is entangled in a prolonged legal dispute to which we shall return in the next chapter.

Local elected representatives—wary of losing cultivable land to the sanctuary—keenly watched the acquisition progress.[78] There is no archival record to suggest that politicians stalled the above acquisition. However, there is ample evidence to suggest that in the 1950s, the political leadership was averse to dispossess cultivators in the interest of wildlife protection. In the 1950s, there was another proposal to create a corridor between the KWS and the Kukrakata Reserved Forest. The FD proposed to constitute the Deusur Reserved Forest in the 230-acre low-lying land at the KWS's western end.[79] The Karbis from three villages grew winter crops here. The FD officials felt that the RF was meaningless if they allowed the cultivation to continue. While the politicians assured the Karbi villagers that they could continue cultivating, forest officials sent them eviction notices. However, successive forest ministers refrained from evicting the cultivators. In April 1957, Rupanth Brahma, the Forest Minister, wanted to find a solution after his ground visit. However, as the ministry was changing, he left the decision to the new ministry. His successor, Hareswar Das,

[76] Periodic *patta* land was reduced from the proposed 83 acre to 17 acres and annual *patta* land from 67 acres to 38 acres. Besides these 55 acres, 600 acres of government land, 200 acres of PGR, 110 acres of fallow tea land came under the revised proposal. Ibid.

[77] Gazette Notification no. For/WL/512/66/17, 7 April 1967, Government of Assam.

[78] Narendra Nath Sarma's questions in the ALA, file no. For/Sett/113/58, 1958, Forest (Settlement), ASA.

[79] Gudam Tokbi and others' petition to the FM, 13 November 1957, file no. For/Sett/546/57, 1957, Forest (Sett.), ASA; from DFO, Nagaon to the CF, 27 May 1958, ibid; the remaining description follows from this file.

noted, "such matters lead to unnecessary agitation and discontent." Finally, the forest officials settled for creating a non-residential forest village and allowed cultivation. We cannot apply political leadership's hesitancy at Deusur to the Haldhibari corridor. However, a general reluctance in ousting cultivators is evident in both cases of corridor creation. As the state faced massive landlessness in the 1950s, the political leadership was unwilling to add to the trouble.[80] The changes in the sanctuary's eastern neighbourhood give a better cue.

Bokakhat, a small town in the east of the KNP, is famed for its pera—*a* sweet prepared from condensed milk. Bokakhat received milk from many *chaporis*, several of which were reserved for the professional graziers. As the pastures made way for residential colonies and cultivated fields, Bokakhat's pastoral past has faded from the public memory.[81] The changes in the pastures are deeply enmeshed in the sanctuary's history. From the late 1940s, these pastures became a site of contestations among the landless peasants, graziers, and sanctuary officials. In the 1940s, the eastern part of the sanctuary was adjoining the Bahikhowa Professional Grazing Reserve (PGR), spread over 2,100 acres. This low-lying thicket was one of the largest pastures in the Sibsagar district, primarily used during the dry months. About 100 graziers in the PGR were among the major milk suppliers to Jorhat and Golaghat. They contributed about forty per cent of the grazing tax of the Golaghat sub-division (now district).[82]

[80] In 1950-51, an estimated 1.86 lakh or 15 per cent 'indigenous' families in Assam's plains districts did not own any land. Director of Statistics and Economics, GoA's estimates, quoted in *ALAD*, Vol. 1, No. 3, 10 March 1951, 87-88; for more discussion, see Saikia, *A Century of Protests*, 21-72.

[81] For an autobiographic recollection, see Chidananda Saikia, *Sannidhyar Rengoni*, Unpublished Manuscript, 1996. I thank Gopikananda Saikia, the late author's son for showing me the manuscript.

[82] SDC's (Grazing) report, 3 November 1951, file no. RSG/181/51, 1951, Revenue-Settlement, ASA.

In the 1940s, the government de-reserved nearly 400 acres of the PGR to meet the local land demand.[83] From 1950, the flood-affected peasants from Rangamati *mauza* demanded cultivable land in the PGR with support from Rajendra Nath Baruah, a powerful Congress Party politician.[84] Soon intense claims and counter-claims over de-reserving the PGR followed. A section of the neighbouring peasants also jumped in to corner their share in the PGR. They argued that left unused, the PGR turned into a thicket sheltering wild pig and tiger preying on their crop and cattle.[85] The graziers countered that opening up the relatively elevated 400 acres from the PGR in the 1940s forced them to move to the Karbi Hills during monsoon.[86] The graziers and peasants both shot stirring petitions to the government through elected representatives. One legislator warned the government of "breach of peace" unless it evicted the 'encroachers' from the PGR.[87] The situation became so tense that the Revenue Minister withheld the opening of the PGR.[88] Amid these debates, the Brahmaputra eroded the Bihia Mishing village in Dhansirimukh in October 1951.[89] Even the most vocal rivals of PGR de-reservation now urged giving land to the 'local' landless.[90] The government opened 660 acres from the Bahikhowa PGR for the landless peasants.[91] The graziers found the remaining

[83] From Golaghat Graziers Association to the Revenue Minister, Government of Assam (RM), undated, most likely March 1952, ibid.

[84] From Baloram Hazarika and others to the RM, 22 August 1951, ibid.

[85] From Kanak Chandra Dutta and others to the RM, 21 September 1951, ibid.

[86] From Golaghat Grazier Association to the RM, undated, most likely March 1952, ibid.

[87] Dalbir S. Lohar, MLA's comments on Golaghat Grazier Association's petition to the RM, 3 April 1952, ibid.

[88] See RM's note on Golaghat Grazier's Association's petition, 3 April 1952, ibid.

[89] From the SDO, Golaghat to the US, RD (Settlement), GoA, 17 November 1952 (no. SGR.VI/25/52/25), ibid.

[90] For the graziers, the local people meant the graziers and landless cultivators in the contiguity of the PGR. People who came from another *mauza* were not local in this sense. Golaghat Graziers' Association's petition to the RM, undated, most likely March 1952, ibid.

[91] From the SDO, Golaghat to the US, RD (Settlement), GoA, 17 November 1952, ibid.

low-lying land in the PGR unfit for year-round grazing. They appealed to the Forest Minister to allow around 1,500 livestock to graze inside the sanctuary.[92]

It was the precise situation the FD wanted to avoid around the RFs and sanctuaries. In 1939, at the behest of the FD, the revenue department instructed the district officials to create large grazing reserves around the RFs. These grazing reserves would work as a buffer around the RFs and reduce human pressure on them.[93] In 1953, the newly formed State Board for Wildlife (SBWL) reminded the government not to de-reserve the PGRs next to the sanctuaries.[94] Accordingly, the government instructed the district officials not to open the PGRs for cultivation in a sanctuary's vicinity.[95] However, it was to wish away the most inevitable as far as the riparian locality was concerned.[96] The Bahikhowa PGR was the only 'vacant' land in the area where the landless could take refuge.[97] "Failed to manage a piece of land anywhere, Mishing villagers … were forced to step back [southward into the PGR from the rapidly eroding banks of the Brahmaputra] to resettle", recalled Sishu Ram Pegu (1930-2021), a retired civil servant from the Mishing community.[98]

From the late 1930s, the Mishing political leaders opposed the PGRs in eastern Assam. They argued that PGRs obstructed *pam* cultivation, the mainstay of the Mishing agriculture.[99] After the independence, it became a political project to throw open the pastures

[92] From Golaghat Grazier's Association to the Forest Minister, Government of Assam (FM), 18 August 1955, file no. For/459/55, 1955, Forest, ASA.

[93] Mackarness, *PRFA 1940-41*, 2.

[94] From CF to Secretary, FD, 10 June 1955, file no. For/322/55, 1955, Forest, ASA.

[95] From Land Reform Officer, RD (Settlement) to all DCs of plains districts, 20 July 1955 (no. RSG.39/55/55), ibid.

[96] In 1929, the settlement officer, Sibsagar, noted that the riparian areas were the only remaining land in the district that will be taken up for cultivation before the next settlement. Rhodes, *Land Revenue Settlement of the Sibsagar District*, 27.

[97] From SDO, Golaghat to the US, RD (Settlement), GoA, 17 November 1952, file no. RSG/181/51, 1951, Revenue-Sett., ASA.

[98] Sishu Ram Pegu, *Dhansirmukhar Katha* (Bokakhat: Puwati Sahitya Sabha, 2009, first published in 2001).

[99] See Saikia, *A Century of Protests*, 105-106.

to the landless cultivators.[100] In such a political climate, the pressure to open the Bahikhowa PGR for landless cultivators outweighed the support to maintain them. In Kaziranga environs, even the cultural scales were heavily tilted in favour of the landless cultivators.[101] The local consensus here was against the eviction of the landless peasants settled in the PGR.[102] 'Encroachment', petitions, and stays on eviction became the rule rather than the exception in the KWS's eastern vicinity. Land speculations were rife amidst scarcity and uncertain returns from land. Even among the erosion-displaced Mishings, some with better resources like elephants could acquire ample land in the PGR.[103] In 1968, the government began regularising the 'encroachment' of 1,070 acres by 250 families in Bahikhowa PGR.[104] The pasture that once served as sanctuary's effective buffer and a source of firewood and forest produces turned into homesteads and fields by the 1960s. It meant that women were increasingly more dependent on the sanctuary for herbs, vegetables, and firewood. Although the KWS authorities did not admit the dispossessed graziers from the Bahikhowa PGR in the sanctuary,[105] they could hardly stop the livestock from these new habitations. Thus, in its north-eastern edges, the sanctuary saw increasing human and livestock footprints than ever, and so were the tussles.

[100] The CM told the assembly that during 1949-52, the government threw open nearly 70,000 acres of pastures for cultivation. It formed nearly 28 per cent of the expanded cultivation for the period. *ALAD*, Vol. 1, No, 4, 10 March 1953, p. 220; it was continuity from the 1940s when the government converted pastures into cultivated fields under the 'Grow More Food' programme. Saikia, *A Century of Protests*, 101.

[101] A Bihu song opened: *Dhansirimukhate banpani barhile/ khahale mirire gaon* (Flood at Dhansirimukh has eroded the villages of the Miching people), *Dukhiya raijor bilai bipattire/ bihure gitake gaon* (Now let's sing the Bihu songs telling the plights of these poor.), Chidananda Saikia, *Bihu Je Malangi Jay* (Bokakhat, 1955). Translation: Gitashree Tamuly.

[102] "Eviction of the flood affected landless people", *Natun Asamiya*, 22 March 1956.

[103] Elephant owners could possess substantial control over the resource, see Pegu, *Dhansirimukhar Katha*, 2001. In Bahikhowa, 26 families held land elsewhere, and at least 3 held more than 16 acres. From SDO, Golaghat to Secretary, RD (Sett.), GoA, 9 March 1968 (no. SGRIII/1/68/30), file no. RSG.30/68, 1968, Revenue, ASA.

[104] Ibid.

[105] From CF, Assam to Secretary, FD, 4 August 1956 (no. A.286), file no. For/459/55, 1955, Forest, ASA.

For the peasants, the land acquired in the pasture did not solve their problems. Heavier spells of flood on the Brahmaputra followed after the 1950 earthquake. The flood began to be seen as a major cause of Assam's underdevelopment and demands for embankment grew louder. After the massive floods in 1954, the Government of Assam embarked on an ambitious embankment project along the Brahmaputra and its tributaries.[106] If the flood was woe in the valley, the KWS's low-lying eastern locale was its first casualty.[107] Peasants demanded protection of their newly acquired land from flood and erosion. Soon, the sanctuary's eastern vicinity saw a slew of embankments.

In the KWS's eastern neighbourhood, seven embankments failed by 1964. People still reposed faith in such structures.[108] Peasants critiqued the government for the delay and quality of work. However, they hardly questioned embankment's efficacy to protect from flood and erosion. In reality, embankments remained an unfinished project for the peasants until the 1970s. The embankment and drainage department wanted an embankment passing through the sanctuary's north to shield the Kaziranga environs from floods. However, the forest officials opposed it. They argued that flood is essential to keep sanctuary's *beels* and grassland alive.[109] Thus the embankment ended near Dhanbari, bordering the sanctuary's eastern boundary. Through the sanctuary's un-embanked stretch, floodwater inundated the villages.[110] In 1966, the government started building an embankment on this incomplete stretch from Dhanbari to Methoni to restrict the floodwater in the reverse direction.[111] However, soon, floods breached the new embankment and caused waterlogging.[112] Flood and

[106] For debates around floods in the early twentieth century, see Saikia, *The Unquiet River*, 409-40.

[107] The area stood at the confluence of the Dhansiri River with the Brahmaputra. Besides, several rivulets of varying sizes descended from the Karbi Hills directly into these plains.

[108] "Embankment in Dhansirimukh", *Natun Asamiya*, 31 January 1964.

[109] Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal", 520.

[110] "Result of the Incomplete Embankment on the Dhansiri", *Dainik Asam*, 20 June 1966.

[111] "Embankment on the Dhansiri", *Dainik Asam*, 23 February 1966.

[112] "Embankment Cut", *Dainik Asam*, 1 October 1975.

waterlogging destroyed the crop and drove people to acute poverty. Today, the embankment along the Brahmaputra is said to be the thirteenth. The threat from flood and erosion persists. Sishu Ram Pegu estimates that between the KWS and the Dhansiri River, 60 sq. km is lost to erosion during the 1940s and 2000.[113] Such a scale of dispossession is noteworthy to understand the diverse ways in which the rural folks related with the conservation practices.

Of all flora and fauna, rhino occupied the prime attention in post-independent Assam. In 1954, the Government of Assam passed the Assam Rhinoceros Preservation Act 1954. It made any unauthorised killing, injuring or capturing of rhinos illegal.[114] As per section 3 of the Act, all the body parts of a rhino (live or dead) belonged to the government. The sanctuary officials were required to inform every rhino's death to the highest authority, followed by an investigation report.[115] No such reporting needed for other cases or illegal activities in the sanctuary.

Rhino killing for its horn did not make a buzz in the 1950s. Until the early 1961, even the KWS officials ruled out any severe rhino killing.[116] However, from July 1961, the regional press reported widespread rhino killing by digging pits in the KWS.[117] Journalists and educated middle class from Bokakhat were at the forefront of highlighting rampant rhino killing in the sanctuary.[118] They argued that fearing reprisals sanctuary officials underreported the killings, and alleged that the guards, officials, and influential politicians colluded with the rhino killers. These reports branded the rhino killers as the enemy of the nation. These also highlighted the increasing pressure on the sanctuary due to illegal fishing.

[113] Pegu, *Dhansirimukhar Katha*, 47.

[114] The amendment in 1933-34 banned possession of rhino horn but did not deter killing for self-defence.

[115] File no. For/WL/12/61, 1961, Forest, ASA.

[116] From RO, Kaziranga to DFO, Sibsagar, 12 June 1961, file no. For/WL/80/57, 1957, Forest (Wildlife), ASA.

[117] "Rhino Killing in Kaziranga", *Natun Asamiya*, 31 July 1961.

[118] Anonymous (from Bokakhat) "Letter to Editor", *Natun Asamiya*, 31 July 1961; Loknath Nath's "Letter to Editor", *Natun Asamiya*, 17 October 1961; Chidananda Saikia's "Letter to Editor", *Natun Asamiya*, 9 August 1961.

However, they attributed such pressures to the increasing auctioning of the *beels* outside the sanctuary to commercial fishers by the government leaving no fish to the villagers. They demanded clean investigations of the reported killings; FD's reaching out to the surrounding peoples for cooperation; and improved armed protection of the sanctuary. Motivation to such activism came from the world-famous sanctuary's promise of development in the historical backwaters. The opposition took cue from such news reports and questioned the government for its failure to afford rhino protection.[119] The government asked the crime investigation department (CID) of police to probe rhino killing.[120] Nonetheless, rhino killing went on throughout the 1960s. We discussed that the Government of Assam declined IBWL's advice to seize crop protection guns around the sanctuaries. However, these bullets did not pierce the thick rhino skin. Around the year 1964, besides digging pits, the shikaris deployed guns with modified cartridges.[121] The dual assault of bullets and pit meant that rhinos came under severe pressure during the 1960s.[122] So what changed around the year 1960 to invite such wrath on the KWS's rhinos?

First, only 55 guards patrolled the 429 sq. km sanctuary. There was a 22 KM stretch of unguarded northern boundary along the Brahmaputra River.[123] Secondly, in the 1950s, the courts could convict only one out of nine accused shikaris.[124] Although Japan had a long history of importing the African rhino horn, the Indian rhino horn joined its import list only

[119] Dandeswar Hazarika, an MLA, moved an Attention Motion in the ALA about the reports. The government said that there were two rhinos each killed in 1960-61 and 1961-62. *ALAD*, Vol. 2, No. 2, 26 September 1961, 60-61.

[120] From Deputy Superintendent of Police (DSP), Sibsagar to Deputy Inspector General of Police (DIG), CID, Assam, 8 September 1964, file no. HPL/456/64, 1964, Home, ASA.

[121] "Poacher injured by poacher's bullet", *Natun Asamiya*, 28 March 1964; Interview with "Old Shikari", 5 July 2019.

[122] During 1965-70, at least 55 rhinos fell to the rhino killers. Yadava, "Detailed Report", 2014, Chapter 7.

[123] Letter no. FG.32/3 dated 25 March 1960 from the CF, Assam to the AS, FD, For/WL/146/60, 1960, Forest, ASA.

[124] U/O No. FG. (67)/4 dated 25 September 1961, file no. For/WL/465/61, 1961, Forest, ASA.

in 1958.[125] As Japan's economy developed rapidly, its rhino horn import doubled from the 1950s to the 1960s.[126] However, weak protective measures and demand for rhino horn alone do not explain the spike by 1960-1961. What brought an increasing number of men to kill rhinos in the KWS? We discussed how the flood and erosion left several hundred families

Figure 3.3: Assam FD's rhino catching in the KWS, 1952. Source: Anonymus, "Catching a Rare Rhino", *Life Magazine*, (April 1952). Downloaded from RRC.

[125] Esmond B. Martin, *Rhino Exploitation: The Trade in Rhino Products in India, Indonesia, Malaysia, Burma, Japan & South Korea* (Hongkong: WWF, 1983), 103-109.

[126] Esmond B. Martin, "Rhino Trade Study: Japan, South Korea, Indonesia, Malayasia and Burma," *WWF Yearbook*, 1982: 294-301.

landless. A cattle epidemic distraught Assam in 1957-58 worsening the draft animal population.[127]1959-1960 was a drought year in Assam. It destroyed estimated 80 per cent *ahu* and *boro*[128] rice.[129] In the Kaziranga environs, besides the crop failure, the *beels* dried, and there was no fish.[130] Erosion, embankment breaches, and crop destruction rattled the KWS's eastern neighbourhood throughout the 1950s and 1960s. Even if the government repaired the embankment beating bureaucratic delays, flood and erosion shattered it soon.[131] In the KWS's low-lying eastern neighbourhood, floodwater drained slowly and only after extensive damage to the *ahu* crop and cattle. As a result, an extraordinary food shortage was building up from 1959 in the locality.[132]

Besides destroying the crop and cultivable land in the Kaziranga environs, erosion and flood also hiked the cost of the agricultural inputs. As the 1960s progressed, bullock prices soared. By 1968, an ordinary pair of bullocks would cost prohibitively between Rs. 1,000-1,500.[133] Inability to afford a pair of bullocks meant that a household had to lease their land against a paltry sum or fallow it. During 1962-66, prices of essential commodities such as rice, kerosene, and mustard oil increased by 25–100 per cent, even at the government rates.[134] The market price, however, remained as high as twice as much.[135] The general scarcity of land, dearer agricultural inputs, and skyrocketing prices of the essentials increased

[127] "Cattle Epidemic Beyond Control in Assam", *Natun Asamiya*, 23 June 1958.

[128] A variety of paddy, sown/transplanted in the winter and harvested in summer.

[129] "70% Crops Destroyed in Assam due to Draught", *Natun Asamiya*, 5 May 1960.

[130] "Bokakhat", *Natun Asamiya*, 8 May 1960.

[131] Kanakchandra Saikia's "Letter to Editor", *Natun Asamiya*, 7 June 1963; "Crop Destroyed in Kaziranga Mauza", *Natun Asamiya*, 28 June 1963.

[132] "Flood of shortage", *Natun Asamiya*, 11 August 1959.

[133] "Monsoon Peaks: Agricultural News", *Dainik Asam*, 29 May 1968; "Rise in Bullock Price", *Dainik Asam*, 10 May 1968; In 1956, a pair of high-quality bullock cost around Rs. 500, Jibakanta Phukan and Priyaram Khanikar's "Letter to Editor", *Natun Asamiya*, 2 January 1956.

[134] "Price-index of consumer goods for last ten years", *Janambhumi*, 14 July 1966.

[135] In July 1966, the government rate rice was Rs. 0.65 per kg. In October 1966, rice was sold at Rs. 1.37-1.50 per kg in Bokakhat. "Letters from Bokakhat", *Natun Asamiya*, 27 October 1966.

peasants' dependency outside cultivation. As a result, begging, theft, fishing, and hunting and killing rhino became commonplace. Rice remained central to one's engagement in these activities. In 1963, a shikari engaged a labourer to dig a pit by paying "Rs. 100 and one *seer* of rice".[136] Hunters exchanged deer venison from the KWS with rice.[137] The Mishings in Dhansirimukh cut *ekra* and cane in the sanctuary and sold them to north bank people to buy rice.[138] The price of rice is a constant index in rhino killers' (my respondents) memories. In the sanctuary's vicinity, rice remained the main target of burglars too.[139] For many, securing rice, the staple to life, was the leitmotif behind digging pits to kill rhinos, illegal fishing, hunting deer, and burglary.

In this backdrop of agrarian crisis and acute shortage, killing rhino for its horn attracted new entrants in the Kaziranga environs. However, it was not new in the locality. Skill sets of trapping rhino and removing its horn had a long career here. In the early 1930s, the sanctuary officials found shikaris' pits everywhere.[140] The FD captured 24 rhinos and sent them to zoos worldwide during 1947-1960 (Figure 3.3).[141] The FD captured these rhinos by digging a pit on their track, a technique the shikaris had long mastered. Identifying a rhino track and trapping it is a work of some skill and experience. With a strong sense of smell, the rhino avoids its usual way unless one removes the earth dug to a safe distance. At times, a rhino could escape a hole made by a novice.[142] Given the workforce requirement in digging

[136] From the DSP, Sibsagar to DIG, Shillong, 12 June 1963 (S. R. No. 27/63), file no. HPL/251/1963, 1963, Home, ASA.

[137] "Deer Hunting in Kaziranga", *Dainik Asam*, 1 August 1967.

[138] "Letter from Bokakhat", *Dainik Asam*, 20 May 1967.

[139] "Letter from Bokakhat", *Dainik Asam*, 27 October 1966.

[140] A. J. W. Milroy, *PRFA 1933-34* (Shillong: AGP, 1934), 3.

[141] "Rhinos in Assam *vis a vis* Kaziranga Reserve Forest", *ALAD*, Vol. 1, No. 26, 6 April 1961, 336.

[142] From RO, Kaziranga to DFO Sibsagar, undated March 1964, file no. HPL/456/64, 1964, Home, ASA.

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pit and sharing of the income, rhino killing could multiply considerably.[143] Digging a 400 cubic feet pit and removing the earth to a safe distance required 6–12 men. Rhino hardly fell into shikaris' trap instantly. Shikaris camped in the sanctuary for several days to try their luck. They needed help to carry rations and cook meals. They often ushered in young men for the job. Only perceptive eyes could detect fresh rhino trails and dig suitable pits. His experience, together with daring manliness, earned the lead shikari some respect from his associates. So the leader cornered the largest share of the money from selling the horn. The young helpers had to settle with a small sum. However, a couple of entries into the sanctuary provided adequate training to start his enterprise for keen eyes. 'Old Shikari' started as a ration career for the old-timer shikaris in the 1960s. Miffed at being paid in peanuts, Old Shikari and his associate formed a new group. A decade later, 'Field Shikari' started by carrying ration for the duo but soon formed a new group. The pair and their protégé made it to the hall of notoriety for killing rhino in the KWS.[144] They sold it to the local traders in Bokakhat and Golaghat, who further exported it to Calcutta.[145] The rhino horn trade in the 1960s was largely confined to the peasantry in collusion with the local traders. It was no match to the organised international racket of the present day.[146]

In the late 1960s, the KWS turned into a battlefield between the shikaris and guards.[147] On 9 January 1968, several MLAs and local leaders pleaded to the villagers for their support against killing rhino.[148] Six weeks later, alleged shikaris shot dead a young

[143] In January 1964, the forest guards reportedly discovered 56 pits in the sanctuary with 13 rhino carcasses in the KWS. "Innovating ways of rhino poaching in the Kaziranga Sanctuary", *Natun Asamiya*, 1 February 1965.

[144] Interview with 'Old Shikari', 05 July 2019 and 'Field Shikari', 07 July 2019, pseudonyms.

[145] "Famous Trader Arrested", *Natun Asamiya*, 12 December 1961; "Famous Trader Arrested with Rhino Horn", *Natun Asamiya*, 5 May 1965; "Illegal rhino horn trader arrested again", *Dainik Asam*, 18 January 1969.

[146] For an account of the trade in the present time, see Deori, *Hunting the Hunters*, 2020.

[147] "Story of the Kaziranga Sanctuary", *Dainik Asam*, 6 August 1966; "The Kaziranga Sanctuary turned into a Battleground", *Dainik Asam*, 8 July 1968.

[148] "Discussion on Curbing the Anti-social Activities in Kaziranga", *Dainik Asam*, 11 January 1968.

guard inside the sanctuary.[149] A young man on duty falling to the rhino killers' bullet caused a massive uproar in the press and political circle.[150] It became a talk of the town that guards used faulty rifles to defend against the well-armed shikaris. There were loud calls to enhance personnel strength and arms in the sanctuary.[151] The government responded by sending a team of 11 armed home guards to the KWS.[152] The headquarters of the newly established wildlife wing under the FD was shifted from Guwahati to Bokakhat (near the KWS).[153] The government introduced the Assam National Park Bill in the following assembly session. It got the presidential consent in April 1969. Official statistics show that rhino killing came down for ten years starting the year 1970.[154]

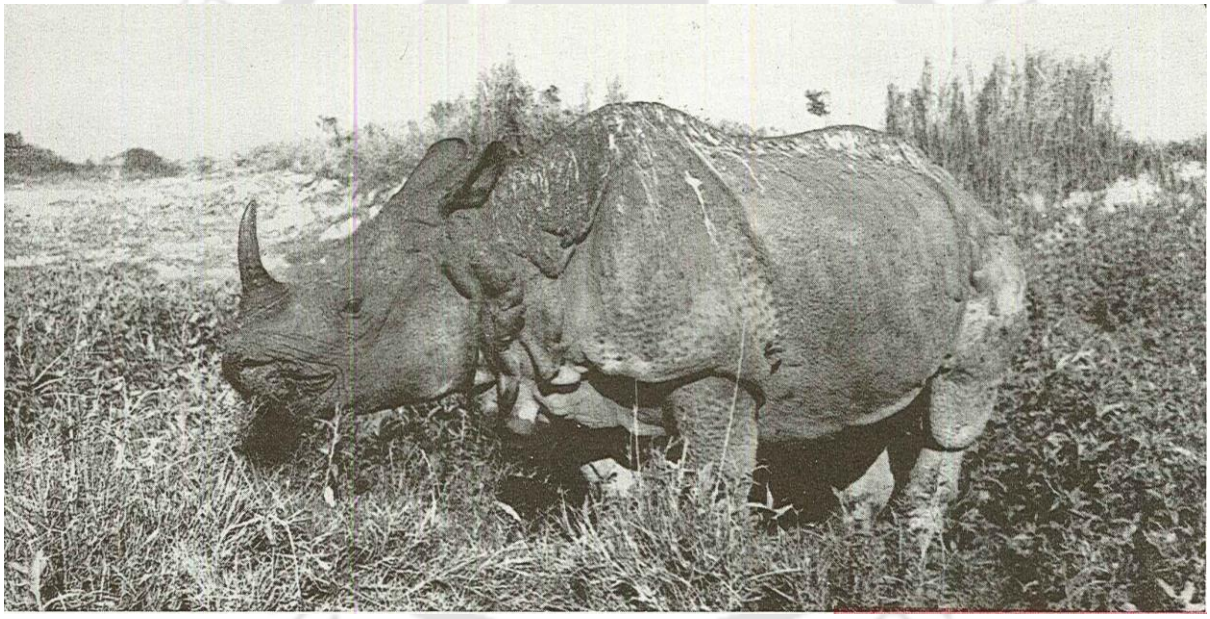


Figure 3.4: 'Burha Gunda', an old rhino that retired to the KWS's periphery. It was so used to the humans that it allowed photography from very close. Source: E.P. Gee, "The most famous Rhino", *Natural History*, New York, 1954: 366-369. Downloaded from RRC.

[149] "Poachers Attack a Forest Guard's Camp in Kaziranga: One Guard Killed", *Dainik Asam*, 26 February 1968.

[150] "Editorial: Bloody Kaziranga", *Dainik Asam*, February 27 1968; "Value of Rhinoceros", *ALAD*, Vol. 1, No. 17, 19 March 1968; Chidananda Saikia's "Letter to Editor" *Dainik Asam*, 6 March 1968.

[151] Bapkan Das's "Letter to Editor", *Dainik Asam*, 9 March 1968.

[152] "Home Guards Sent to Kaziranga", *Dainik Asam*, 1April 1968.

[153] "Headquarters of the Wildlife Department Transferred to Bokakhat", *Dainik Asam*, 11 July 1968.

[154] During 1971-1980, 45 rhinos fell for their horn. Yadava, "Detailed Report", Chapter 7.

The massive killing of rhinos in the 1960s was as much a reflection of the breakdown of earlier protection measures as the changing agrarian condition. In the 1960s, the protection measures in the sanctuary underwent a drastic change from the previous decade. In the 1950s, sanctuary's patrolling strength was small.[155] R. C. Das, the sanctuary official during 1951–1957, maintained an effective social network with the villagers.[156] Gee praised Das's role in checking rhino killing in the early 1950s.[157] 'Burha Gunda' and 'Kan-kata' entertained visitors even before entering the sanctuary (Figure 3.4). In numerous instances, villagers or graziers deposited the horn they found to the sanctuary officials or reported a dead rhino.[158] In the older villages along the Mora Diphalu, forest officials' close engagement with the villagers probably avoided any large scale rhino killing in the 1950s. The ecological devastation, sudden erosion of buffers, and rural poverty put record pressure on the sanctuary.[159] It was not easy for the sanctuary officials to build similar intimacy with villagers springing up every year. When the crisis hit, personal forms of intimacy gave way to more militarised protection in the 1960s.[160] Announcement of the national park against such a backdrop of bloodshed followed that the KWS entered a career of aggressive militarisation from mid-1960s. Assault on the rhino did not bore well on grazing, fishing, and collection of forest produce in the sanctuary. Nevertheless, overemphasis on the rhino obscures these areas of engagement between the peasants and the KWS.

[155] At the end of the decade, 55 men guarded the 429 sq. km sanctuary, the CF to the Asst. Secretary, FD, 25 March 1960, file no. For/WL/146/60, 1960, Forest (Wildlife), ASA.

[156] Das was an active participant in local *bhaona* (religious plays). See Deepak Gogoi's biography in Sharma and Nath, *Kazirangar Borenya*, 137-139; he also took along school boys to the sanctuary, probably to induce them towards conservation, Interview with an 85-year-old resident, Sepenakobowa, Kaziranga, 4 February 2018.

[157] Das died in 1962, few years after his transfer to another place. Gee, *Wildlife of India*, 167-168.

[158] The Range Officer (RO) to the CF, 24 and 29 November 1961, file no. For/WL/12/61, 1961, Forest, ASA.

[159] For an excellent literary depiction, see Dilip Phukan, *Jalpadumar Panchoi* [The Pinnace of Lotus] (Banahansa: Tezpur, 2013), 23-37.

[160] This departure was not just in the new villages but with the older ones too. Debeswar Saikia's, a resident of Lukhurakhania village, memoir recalls no local officer after R. C. Das. Saikia, *Kazirangar Buniyad*, 19-25.

Contesting Conservation: Livestock, Fish, and Venison

Independent India inherited a KWS with its fluid edges. Wild animals lived besides multiple human usages, especially along the sanctuary's edges. The emphasis on rhino and its killing eludes that everyday tussle in the Kaziranga environs was around pasture, fish, and venison. What interests us here is the new meaning these practices earned in the changed agro-ecological and political conditions in which the conservation practices unfolded.

After the independence, the government's renewed interest in wildlife led to an intense review of the past concessions. In 1947-48, the sanctuary officials discovered nearly 16 rhino corpses. The FD blamed the domestic livestock for spreading anthrax.[161] For a decade or so, the FD had been tolerant to grazing. However, wildlife conservation revived its irritation.[162] Let us first discuss how the FD dealt with the villagers grazing along the KWS's southern boundary. The colonial government gave grazing rights to the villagers (mainly Assamese-speaking peasants) up to a mile inside the sanctuary as a reconciliatory measure to offset their losses to the wildlife.[163] Milroy revoked this concession in the 1930s, but the FD had to resume it soon.[164] Following the death of 16 rhinos, the Divisional Forest Officer stopped the villagers from grazing inside the sanctuary. However, in 1948-49, Stracey gave them temporary relief.[165] Following Ali and Ripley's visit, Stracey cancelled the concession to the villagers. The livestock keepers from Lukhurakhania and Mohpara villages in the south of the sanctuary strongly objected to the decision.[166] The graziers' petition received strong

[161] Stracey, *PRFA 1947-48*, 19.

[162] For FD's tolerance of grazing circa 1940, see Saikia, "Making Room Inside Forests", 2014.

[163] From DCF, Sibsagar to the DC, Sibsagar, 3 March 1925 (no. B-468), file no. X-28, 1925, Revenue, ASA.

[164] No direct record is available for this. However, it is clear from the following footnote that they enjoyed grazing until 1948.

[165] From CF to the Assistant Secretary (AS), General & Judicial Branch (Forests), GoA, 24 March 1950, file no. For/WL/146/60, 1960, Forest (Wildlife), ASA.

[166] Unsigned petition to the CF, Assam, 11 February 1950, ibid.

support from Rajendra Nath Baruah.[167] Baruah also questioned the FD's proposal to expand the KWS by 500 feet towards the south. In the 1950s, conservationists like Gee, Dharmakumarsinhji, and Talbot, all suggested the removal of grazing along the southern boundary.[168] However, the FD knew well that removal of the graziers would follow a severe backlash. Thus grazing remained along the KWS's southern edges until its renaming as a national park in 1974. In contrast, the FD never lost sight of the graziers along the sanctuary's northern periphery.

As discussed in chapter 2, from the 1930s, the Nepalis graziers from the Darrang district concentrated in the *tapus* north of the sanctuary.[169] In February 1950, Stracey led an initiative to include seven of such *tapus*. Fixing the sanctuary's northern boundary was challenging in a terrain rambled by the river channels. In a meeting held in Bhawane *tapu*, the Sibsagar and Darrang authorities decided that the Brahmaputra's left 'stable bank' was the sanctuary's northern boundary as well as the inter-district boundary.[170] However, only Bhawane *tapu* was within the stable bank, i.e. in the Sibsagar district, and hence the FD claimed that it was within the sanctuary. Brahmaputra's channels cut the rest of the six *tapu*s off the sanctuary. The sanctuary had no claim on these *tapu*s coming under the Darrang district. Stracey pushed for the reservation of these *tapu*s.[171] The graziers were once again led by the Congress party veteran Chabilal Upadhyay to hold on to their rights.[172] As for the

[167] Rajendra Nath Baruah raised questions in the ALA, see *ALAD*, Vol. I, 27 March 1950, 610-12.

[168] From E. P. Gee to FM, 20 August 1953, file no. RSG-92, 1950, Revenue, ASA; Dharmakumarsinhji and Ghorpade, "A Special Note on Kaziranga Sanctuary", 1955, file no. For/WL/224/55, 1955, Forest (Wildlife), ASA; Talbot, "A Look at Threatened Species".

[169] The Brahmaputra's changing courses, expanding cultivation from the far end, and sanctuary officials' need for support were the reasons behind their concentration.

[170] "Decision of a Conference on Kaziranga Game Sanctuary held at Bhabani Tapoo (Bhawane/Koloni Tapoo) camp on the Brahmaputra Regarding Kaziranga Game Sanctuary on 8th February '50", file no. RSG-92, 1950, Revenue, ASA.

[171] Ibid.

[172] We discussed in chapter 2 how three decades ago, Upadhyay led the graziers' protest against their ouster from the Game Reserve's second addition.

removal of the graziers, Stracey paused, "without being able to provide them with alternate areas will be futile and cruel to the cattle at least." So the principle was to "restrict it to the minimum without allowing any new rights or entrants". He was trying to afford the FD better control over the graziers by barring any new entrants. Moreover, Stracey had reasons to trust the graziers. He added, "our thinly scattered staff in the northern side require some assistance to remain there … and they [will] get help from the khuti-wallas [graziers]."[173]

While the FD pushed the Darrang revenue authorities to reserve the *tapu*s within the sanctuary, the latter hardly relented.[174] Instead, Darrang officials continued their control by collecting grazing taxes and issuing fishery leases on the streams between the *tapu*s. As the 1950s progressed, there were allegations that deer hunters, fishers, and rhino killers made a thoroughfare in the KWS through its porous edges.[175] In 1955, somewhat less ambitiously, the FD proposed to include the Bhawane and Dhane *tapu*s in the sanctuary.[176] Bhawane was *within* the stable bank five years ago but now stood *adjacent* to it as its "banks had not developed firmness". A forest official's frustration at such fluidities is evident in his following observation.

> The north boundary of the Kaziranga as per the latest so called amended and more correct notification was that the north boundary of the Sanctuary would be the south boundary of the Darrang in this Section. Therefore, the description of the south boundary of [Darrang] District, had to be studied. This description stated that the left bank of the Brahmaputra was the boundary between Darrang and Sibsagar. Now the question arose what the left bank is.

[173] From CF to AS, General & Judicial Branch (Forests), Assam, 24 March 1950, file no. For/WL/146/60, 1960, Forest (Wildlife), ASA.

[174] From DFO, Sibsagar Division to the DC, Darrang, 4 April 1950 (no. B/2036-38), file no. missing, ASA.

[175] "Deer hunting in Kaziranga Sanctuary", *Natun Asamiya*, 19 June 1955.

[176] "A note on the position regarding the north boundary of the Kaziranga Wild Life Sanctuary with reference to the difficulties regarding wild life preservation", file no. RSS.471, 1955, Revenue (Settlement), ASA.

> The left bank was then taken as the left firm bank. This did not improve matters as regards clarity as the firmness of a bank was a matter of opinion.[177]

Zealous to add such *tapus* to the sanctuary, the FD referred the case to the legal remembrance (LR), a state government's wing, to resolve inter-departmental legal disputes. The LR pronounced that any sandbar appearing next to the sanctuary belonged to it even if it came under the Darrang district.[178] The principle became the touchstone for the FD to add new *tapus* to the KWS. The FD no longer had to be in elusive search of the 'firm bank'. Darrang authorities considered Bhawane and Dhane as professional grazing reserves (PGR).[179] Ordinarily, such unreserved land came under USF or government waste. However, the LR's opinion changed it from USF to sanctuary land. Unlike in the USF, the FD no longer needed to respect the graziers' and cultivators rights.[180] However, the FD faced different realities on the ground.

Despite LR's legal redefinition of the *tapu* land, the FD did not secure its control over them. Muslim peasants grew cash crops like onion under the Darrang revenue authorities' assistance. Besides, they also joined buffalo herding like the Nepalis.[181] Darrang peasants protested when in 1955, the FD proposed to include the Dhane and Bhawane *tapu* in the sanctuary.[182] The Deputy Commissioner, Darrang, agreed to give the *tapus* to the sanctuary only if it did not mean "deprivation of rights and enjoyment by local villagers and graziers."[183] The FD assured him that the peasants and graziers would enjoy the "privileges" of cultivation, grazing, and forest produce collection. It is noteworthy that while the Deputy

[177] Ibid.

[178] Ibid.

[179] From DFO, Sibsagar Division to the DC, Darrang, 4 April 1950 (no. B/2036-38), file no. missing, ASA.

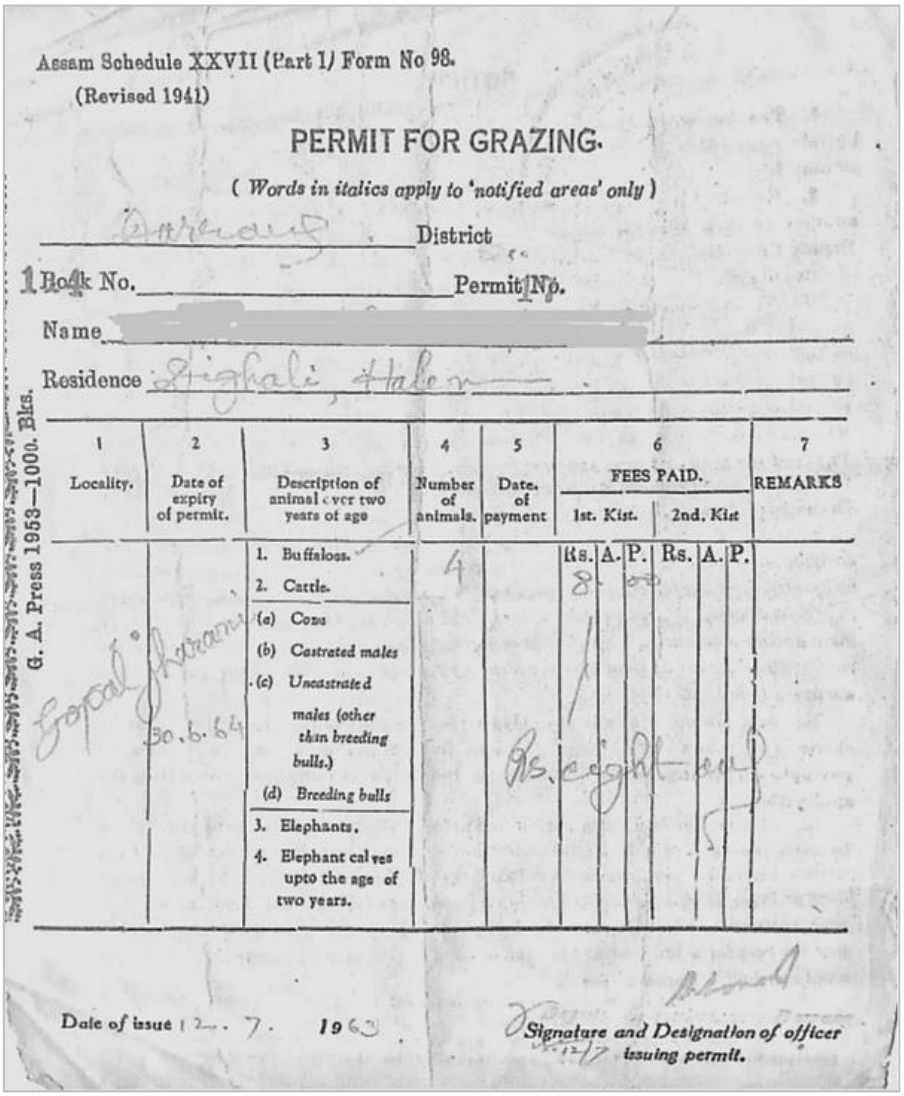
[180] For community rights in the USF, see Saikia, *Forests and Ecological History of Assam*, 77-78.

[181] From DFO, Sibsagar Division to the DC, Darrang, 4 April 1950 (no. B/2036-38), file no. missing, ASA.

[182] Resolution of Biswanath Public Meeting, 22 April and 15 May 1955, file no. RSS.471, 1955, Revenue (Sett.), ASA.

[183] From DC, Darrang to Secretary, RD, 19 September 1955 (no. 13562R), ibid.

Commissioner emphasised the *rights*, the FD thought of these as *privileges*. The privileges were conditional to "so long as the villagers desisted from poaching … and … assisted the Forest Department by preventing others …"[184] Months later, the FD retracted from its stand and ordered the graziers to vacate the Dhane *tapu*.[185] Although the FD could not remove the graziers, they strictly enforced livestock numbers in these *tapu*s.[186]



Assam Schedule XXVII (Part 1) Form No 98.
(Revised 1941)

PERMIT FOR GRAZING.

(*Words in italics apply to 'notified areas' only*)

Darrang District

Book No. 1 Permit No. 1

Name [redacted]

Residence Sighali, Halen

G. A. Press 1953—1000. Bks.

1 Locality.	2 Date of expiry of permit.	3 Description of animal over two years of age	4 Number of animals.	5 Date of payment	6 FEES PAID. 1st. Kist. Rs.	A.	P.	2nd. Kist Rs.	A.	P.	7 REMARKS
Gopal Jharani	30.6.64	1. Buffaloes.	4		8						
		2. Cattle.									
		(a) Cows									
		(b) Castrated males									
		(c) Uncastrated males (other than breeding bulls.)			Rs. eight only						
		(d) Breeding bulls									
		3. Elephants.									
		4. Elephant calves upto the age of two years.									

Date of issue 12. 7. 1963

Signature and Designation of officer issuing permit.

Figure 3.5: A grazing permit in Gopal Jarani, north of the KWS, 1963-64. Reproduced for representation only with the grazier's name hidden. Source: The grazier's son.

[184] "A Note", ibid.

[185] Narad Chandra Upadhyay and others' petition to the DC, Darrang, 20 September 1955, ibid.

[186] Chabilal Upadhyay's petition to the FM, 22 February 1960, file no. 778, 1959, Forest (Wildlife), ASA.

Despite FD's mounting pressure, the Darrang graziers stayed on in Bhawane, Charigharia, and Arimora *tapu*s—all in the sanctuary's vicinity—until the mid-1960s.[187] The rinderpest of 1957-58 wracked havoc all over Assam and hit the graziers in the sanctuary's vicinity too.[188] Amidst such pressures, the graziers formed the Kaziranga Graziers Association in 1958.[189] Besides Chabilal Upadhyay, his protégé Bishnulal Upadhyay (1917-2007), now the Behali MLA, led the association. The graziers, on several occasions, stood in support of the sanctuary officials against illegal hunters and fishers. It was probably the only sure way to secure their precarious privileges.[190] However, FD's suspicion on the graziers that they "often harboured poachers" never died down. While graziers highlighted their assistance to the FD to curb illegal activities, the latter believed that "the graziers being poor succumb to the temptations of meat and tips and instead of helping the Department harbor poacher and help poaching."[191] The conditions set for the graziers were loaded against them to fulfil over a while. Far from being homogeneous, graziers and peasants came from many riparian villages of the north bank. Their composition was always in the churn with new entrants and migrations.[192] For a handful of guards, keeping a vigil in the sanctuary's riparian edges was tough.[193] Competition over resources between the graziers from either bank also

[187] Draft reply to Bishnulal Upadhyay's questions in the ALA, file no. For/WL/527/61, 1961, Forest (Wildlife), ASA; the FD ousted the graziers from the Charigharia and Arimora *tapu*s in 1920. However, these *tapu*s drifted away from the sanctuary and returned, bringing the graziers along.

[188] Chabilal Upadhyay's petition to the CM, 24 December 1957, file no. For/Sett/247/58, 1958, Forest (Settlement), ASA.

[189] Kaziranga Graziers' Association's resolution 2 "ka" and "kha", 9 July 1959, file no. 509, 1959, Forest (Wildlife), ASA.

[190] Chabilal Upadhyay testified against several influential men hunting illegally in the KWS. See his letter to the CF, Assam, 13 December 1954, file no. For/WL/224/55, 1955, Forest (Wildlife), ASA.

[191] From CF to AS, FD, 25 March 1960, file no. For/WL/146/60, 1960, Forest (Wildlife), ASA.

[192] Interview with an ex-grazier, 86 years, Gang-Mouthan, Biswanath, 15 October 2017. His family joined grazing in 1959.

[193] In 1960, five game watchers, two boatmen and one forester patrolled a 22-km stretch of sanctuary's northern edges, from CF, Assam to AS, FD, 25 March 1960, file no. For/WL/146/60, 1960, Forest (Wildlife), ASA.

intensified the allegations.[194] For the graziers, the intensity of the threat to vacate the *tapu*s only increased with time.

As the record scale of rhino killing surfaced from the early 1960s, pressure on the graziers to vacate the *tapu*s further increased. In the mid-1960s, the FD firmly pushed for the addition of *tapus* like the Bangse and Thape, initially proposed in 1950 under Stracey's leadership.[195] After the 1950 earthquake, the Brahmaputra widened considerably in the sanctuary's north.[196] The Darrang authorities were now less interested in administering the *tapu*s further from its mainland and closer to the sanctuary.[197] In renaming the sanctuary as a national park, it became evident that the graziers will have to go. In 1972, the sanctuary added seven *tapus* despite the graziers' objections that these were their last options.[198] The graziers dispersed to various riparian locations upstream on the Brahmaputra as far as up to Kobu and Sadiya.[199]

What explains the plot in which the graziers had to go from the *tapu*s in the late 1960s? Rhino's cultural, economic, and political worth that often fed each other made the graziers' claim over the *tapu*s untenable. First, the rhino increasingly captured the Assamese imagination from the 1950s. Popular culture like films tapped rhino's rising fame (Figure 3.6).[200] Illegal rhino killing in the 1960s flared up the popular emotions calling for

[194] Ibid.

[195] From DC, Darrang to US, FD, 12 August 1965, file no. RSG. 286/66, 1966, Revenue (Grazing), ASA.

[196] It increased from 8.36 km in 1912 to 11.96 km in 1972. J. N. Sharma and S. Acharjee, "A GIS Based Study on Bank Erosion by the River Brahmaputra around Kaziranga National Park, Assam, India," *Earth System Dynamics Discussions*, 2012: 1085-1106.

[197] From DC, Darrang to US, FD, 12 August 1965, file no. RSG. 286/66, 1966, Revenue (Grazing), ASA.

[198] Note on page 1, file no. RSS-502, 1975, Revenue, ASA.

[199] Bishnulal Upadhyay, "Paraspar Virodhi Kura (Contradictory Things)," *Bulletin* (Asom Gorkha Sammelan) 9 (1970).

[200] The same year saw the beginning of another Assamese film, *Kazirangar Kahini* (Kaziranga's Story). It got released in 1982. "The Latest Movie: Kazirangar Kahini", *Dainik Asam*, 11 June 1982.

Figure 3.6: *Aranya* [Forests] (1971), an Assamese film, highlighted an upright officer trying to free forests from the nexus of traders, rhino killers and lumbers. Source: Youtube still, https://www.youtube.com/watch?v=5HmQYWxZ7oU, accessed 23 May 2021.

improved protection.[201] Rhino matched the 'cosmopolitan tiger' of the Sundarbans in the sense that the local meaning of the sanctuary and rhino gave way to a universal protection-centric view.[202] In the 1960s, Assamese nationalists were concerned over their language and identity, and Assam's political fragmentation creating separate states for the Nagas and Mizos.[203] Amid such concerns, the rhino and Kaziranga sanctuary emerged as symbols of pride that gave Assam a unique place in not only the nation's imagination, but internationally too. In contrast, the cultural imagination about the *tapu*s was one of opaque and den for the outlaws.[204] In such a cultural view, the graziers, especially in the northern riparian areas were

[201] See "Editorial: Bloody Kaziranga" in *Dainik Asam*, 27 February 1968.

[202] Jalais, *Forest of Tigers*, 2011.

[203] Sanjib Baruah, *Durable Disorder: Understanding the Politics of Northeast India* (New Delhi: Oxford University Press, 2007), 128–140.

[204] See Apurba Sarma, *Baghe Tapur Rati aru Anyanya Kahini* (Guwahati: Students Store, 1996), for a brilliant depiction of some of the *tapu*s north of the KWS as hidden from the village society and view of the law. For invisibility and distance from the arm of the law of people living in the Damodar floodplains, see Kuntala

'nuisance' best removed from the sanctuary. The colonial government's intolerance towards the itinerant people in remote areas cast its shadow even after the independence.[205] Secondly, the government began to realise the rhino's economic value. The price of a rhino increased ten-fold from Rs. 10,000 in 1947 to Rs. 1,00,000 in 1968. During 1947-61, the FD sold 25 rhinos to zoos worldwide, earning more than Rs. 2.50 lakh.[206] The government also sold the horns collected from the dead rhinos.[207] Grazing as a source of revenue was no match to the rhino's economic worth.[208] Thirdly, Assam's electoral politics tapped rhino's economic and cultural worth. The opposition attacked the government for its failure to protect the rhino.[209] National park became a potent idea to overcome the discords that stalled acquisition in the 1950s.[210]

If grazing made a gradual and nearly noiseless retreat from the sanctuary, the contestations around fishing were much more politicised and often violent. These contestations still echo from the KNP.[211] Like assault on the rhinos, fishing cannot be separated from the conditions of resource scarcity in the Kaziranga environs. IBWL members like E. P. Gee were aware of the perils of landlessness and resource scarcity around the sanctuaries. However, their challenge was to convince the landless people and the "persons in

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Lahiri-Dutt and Gopa Samanta, *Dancing with the River: People and Life on the Chars of South Asia* (New Haven and London: Yale University Press, 2013).

[205] For an excellent treatment of the colonial period, see Singha, *A Despotism of Law*.

[206] For prices from 1947-1960, see "Rhinos caught and sold or gifted away", *ALAD*, 28 September 1961, Vol. 2, No. 2, 1961; "A Rhino Costs Rs. 30,000 in India and Rs. 1 lakh abroad", *Dainik Asam*, 25 March 1968.

[207] From the CF to the US, FD, 10 October 1957, file no. For/WL/386/57, 1957, Forest (Wildlife), ASA.

[208] In 1957-58, the demand of grazing tax was Rs. 7488, from DFO, Sibsagar to the CF, Assam, 8 May 1958, file no. For/Sett./247/58, 1958, Forest (Settlement), ASA; in 1959, the KWS earned Rs. 30,000 per rhino exported to a foreign zoo. *ALAD*, Vol. 1, No. 26, 6 April 1961, 336-37.

[209] "Rhinos caught and sold or gifted away", *ALAD*, Vol. 2, No. 2, 1961; "Rhinos in Assam *vis a vis* Kaziranga Reserve Forest", *ALAD*, Vol. 1, No. 26, 1961.

[210] See Secretary, FD's note on p. 4, file no. RSS-502, 1975, Revenue, ASA.

[211] On the eve of Magh Bihu and Bohag Bihu in 2021, villagers clashed with the guards restricting them from fishing. "Tension in Kaziranga around Fishing on Uruka", *Dainik Janambhumi*, 14 April 2021; "Tension in Kaziranga around Fishing on Uruka", *Khabar*, 16 January 2021.

high positions in India" that conserving the wildlife sanctuaries was in the 'public interest'. Gee equated public interest with economic benefits India could reap by making them attractive to the tourists.

> As the revenue from the tourist trade is an indirect one, not confined to one place but spread over the whole country visited, it follows that every Re. 1 spent by foreign visitors at Kaziranga about Rs. 30 or 40 are spent in the rest of India. Therefore for every Rs. 6000 (the amount paid by foreign tourists at Kaziranga in 1954-55) spent here, about Rs. 2,10,000 are spent in the rest of India.
>
> It is clear, therefore that the economic value of Kaziranga as a wild life sanctuary is so important to Assam and to India that this piece of (166 square miles) should be preserved *inviolate* with *sacrosanct* boundaries as a national park.[212]

Economic reasoning to conservation already had an attraction among the state's political leadership. In the 1950s, the Government of Assam invested in making the KWS attractive to tourists.[213] However, IBWL's conflicting expectations left Assam's leadership clashing about resource extraction from the KWS. In the same article where Gee wanted an inviolate KWS, he quoted the IBWL resolution in 1955 that read, "it is not an essential condition of National Parks that there should be no human intervention.[214] Assam's political leadership drew selectively from these conflicting positions to justify or oppose resource usage like fishing in the KWS.[215] In contrast to the economic value the conservationists and political leaders often put on the KWS, peasants had multitudes of other conceptions. Pastures and commons giving way to homesteads and fields tell a parallel story of declining

[212] Gee, "The Management of India's Wildlife Sanctuaries and National Parks, Part III," 4-5, (emphasis added).

[213] "Kaziranga Tourist Lodge", Press Note no 146, 18 April 1955, file no. For/WL/39/55, 1955, Forest, ASA.

[214] Gee, "The Management of India's Wildlife Sanctuaries and National Parks, Part III," 2, 5.

[215] From FM to President, APCC, 7 January 1953, file no. For/70/55, 1955, Forest, ASA.

livelihood resources outside the sanctuary. As the peasants' reliance on the sanctuary increased for a living, the sphere of criminalisation expanded too.[216]

The colonial government allowed no fishing rights in the Game Reserve in its original settlement and later expansions. However, it allowed the anglers against a fee.[217] The villagers in the sanctuary's south had access to the Mora-Diphalu River. Moreover, fishing inside the sanctuary did not attract a severe penalty. The Darrang authorities leased the Brahmaputra channels in the north. These fishers allegedly fished in the sanctuary. It gave the FD a reason to earn revenue by leasing certain *beels* from 1944-45.[218] In 1949, the government decided to stop such leases following complaints that the lessees over-fished and illegally hunted. Soon the pressure to auction the *beel*s mounted on the newly elected Assam government through universal suffrage. Ramnath Das, the Forest Minister, invoked IBWL's pragmatism of resource extraction from sanctuaries to lease the *beel*s.[219] However, Stracey opposed leasing any *beel* inside the KWS.[220] Stracey did not relent until he left for the Forest Research Institute, Dehradun, in February 1955, and Das did not hold the ministry for long after that. The IBWL's flexibility in resource extraction proved attractive to the elected ministers. However, such provisions also gave rise to a fresh set of conflicts over the sanctuary's resources.

[216] While the FD arrested 36 persons in 7 incidents during 1951-55, it arrested 84 persons in 18 incidents during 1956-60. See notes, p. 2 in file no. For/WL/465/61, 1961, Forest, ASA; a survey of the newspapers suggests that several illegal acts went un-reported, e.g., "Illegal Fishing in Kaziranga", *Natun Asamiya*, 1 April 1954.

[217] Forest Department Notification, 1 October 1927, *The Assam Gazette*, 5 October 1927, 1383-85.

[218] Annual returns from the lease came down from Rs. 36,520 in 1944-45 to Rs. 6,000 in 1948-49. Sr. CF's notes to Chief Secretary, 20 April 1949, file no. For/70/55, 1955, Forest, ASA.

[219] From FM to the President, Assam Pradesh Congress Committee, 7 January 1953, ibid.

[220] From the CF, Assam to the Secretary, FD, 11 May 1953 (no. C-231), ibid.

In the 1950s, Assam faced an acute shortage of fish—the staple of rich and poor alike.[221] It created a huge demand for fish, especially in the urban areas. Das was promoting the interests of the fishermen (mainly the Scheduled Caste groups) from the south bank.[222] These fishers argued that the north bank fishers illegally fished in the sanctuary draining the government's revenue prospects. Generally, the peasants viewed the KWS *beels* as the spawning ground of fish. Annual floods restocked fish in the nearby channels and water bodies.[223] The north bank graziers strongly opposed selling the sanctuary *beels*. They alleged that the past lessees overfished and blocked the mouth of the channels reducing the fish on the Brahmaputra.[224] Although fishers did not harm the grazing prospects *per se*, it was in the graziers' interest to keep possible 'menaces' away from the sanctuary to hold on to their perilous grazing privileges. In barring fishers inside the sanctuary, Stracey was less concerned by the possible damage to the fish. Instead, his refusal to fishing was based on "the fact that it is contemplated to convert this Sanctuary into a National Park."[225] Thus, Stracey echoed Gee's hopes for an 'inviolate' sanctuary rather than the IBWL's pragmatism over resource use. However, why was Stracey unrelenting on the fishers while still allowing the graziers in the sanctuary? Allowing the graziers on the sanctuary's northern edges was strongly tied to the strategy of slowly moving towards an inviolate sanctuary. Besides their support to patrol the porous edges, the graziers were amenable to regulation. While graziers stayed in their *khuti*s, fishers were in and out of the sanctuary and were difficult to track. Stracey prevailed: the KWS did not auction the *beels* to the commercial fishers. However, it could not stop leasing the two *beels*, Hahaya and Kalmua, to the local public institutions.

[221] Newspapers regularly highlighted the fish shortage, see "Editorial", *Natun Asamiya*, 8 February 1954; Lila Gogoi's "Letter to Editor", *Natun Asamiya*, 7 April 1954.

[222] For group interests, see Minaram Gaobura and others' petition to the FM, Assam, undated, 1953, ibid; Das was elected to the ALA from Jorhat (North), a reserved constituency for the Scheduled Caste (SC).

[223] Anonymus ("close neighbour's") "Letter to Editor", *Natun Asamiya*, 22 October 1955.

[224] From Chabilal Upadhyay to CM, 22 December 1952, file no. For/70/55, 1955, Forest, ASA.

[225] From the CF, Assam to the Secretary, FD, 11 May 1953 (no. C-231), ibid.

Fishing in these *beels* financed schools and a college in the Kaziranga environs until the 1970s.[226] Besides, villagers could fish in the sanctuary's southern boundary Mora-Diphalu.

Traditionally, during January-March, peasants from even far-flung villages fished in the KWS.[227] When most water bodies dried during these dry months, the *beels* in the low-lying sanctuary were still alive. From the early 1950s, sanctuary officials began to restrict such fishing, even for household consumption. It was unacceptable to the peasants. On 27 March 1954, hundreds of villagers reportedly gathered in the sanctuary to fish. A handful of forest guards could not stop them.[228] Unauthorised fishing in the sanctuary never ceased. The forest guards often detained fishers.[229] We do not have the fishers' views from the 1950s and 1960s to understand how they justified their acts. Nevertheless, we have ample clues to what constituted a crime in the peasants' worldview.

Peasants did not consider fishing within the KWS a crime. Instead, unauthorised fishing was a way to uphold their fast-eroding customary rights.[230] The sanctuary officials allowed fishing once or twice a year until the 1980s shows peasants' partial victory.[231] Subsistence and community need was a strong defence for fishing. The quantum of punishment against fishing was hardly a deterrent.[232] The commercialisation of commons also gave reasons to defend fishing in the sanctuary. The peasants complained that there was no fish for local consumption as the government leased all the *beels* outside the KWS.[233]

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[226] "Fish of the Kaziranga Beels", *Dainik Asam*, 21 March 1972.

[227] Anonymus ("Bokakhat Residents"), "Letter to Editor", *Natun Asamiya*, 13 October 1955.

[228] "Illegal Fishing in the Kaziranga Sanctuary" *Natun Asamiya*, 1 April 1954.

[229] "Illegal Fishermen in Kaziranga", *Dainik Asam*, 14 May 1966.

[230] For a similar reasoning to peasants' defiance of laws in the Arusha National Park, Tanzania, see Neumann, *Imposing Wilderness.*

[231] "Bihu, Fish and Middlemen's Notoriety", *Dainik Asam*, 6 February 1986.

[232] FD let go of 60 fishers with a penalty of Rs. 5 each. "Illegal Fishermen in Kaziranga", *Dainik Asam*, 14 May 1966.

[233] Anonymus ('Bokakhat Residents') "Letter to Editor", *Natun Asamiya*, 13 October 1955.

They claimed superior rights over the sanctuary resources than the 'outsiders'. The perceived difference between the locals and outsiders is often problematic in the Kaziranga environs. Most often, this difference was established by equating the outsider to commercial profiteers.[234] Even the local educated class—probably less dependent on fishing—supported the local peasants' right for a living as opposed to the traders. It is evident in their reporting of profiteers to senior officials.[235]

Things began to change drastically while converting the KWS into a national park from the late 1960s. The FD proposed to include the Mora Diphalu River (the southern boundary) in the national park. The decision enraged the villagers.[236] The inclusion meant that villagers' rights to the river would cease. More importantly, the peasants argued that the river was a natural barrier against wildlife. Despite protests and memorandums, the Mora Diphalu became part of the park in 1974.[237] On 2 May 1977, chief minister Sarat Chandra Singha (1972-78) visited the national park. Singha told the villagers that the new boundary would not be changed. Nevertheless, he assured, there would be no restriction on the villagers to use the river.[238] Singha's government lost power in the next state election in March 1978. His mediation provided temporary relief to the villagers, but the FD had no compulsion to honour it.[239]

[234] Loknath Nath and Kanak Chandra Saikia to DFO, Sibsagar, 22 April 1958, file no. For/WL/282/58, 1958, Forest, ASA.

[235] Loknath Nath and K. C. Saikia's petition to the DFO, Sibsagar, 22 April 1958, file no. For/WL/282/58, 1958, Forest (Wildlife), ASA.

[236] Debeswar Barua's "Letter to Editor", *Dainik Asam*, 21 August 1973; "Assurance to Stay Eviction in Kaziranga", *Dainik Asam*, 17 March 1974.

[237] Gazette Notification no. For/WL/722/68, 11 February 1974, Government of Assam.

[238] "National Park's New Boundary Will Remain" *Dainik Asam*, 2 June 1977.

[239] During 2017-2019 (my visit), several villagers claimed rightful access to the Mora Diphalu River.

The revenue department's aggressive leasing of fisheries soured the relationship between the leaseholders and villagers.[240] Over time, there were violent clashes between the two.[241] Soaring fish prices led the government to regulate the price often.[242] In the Kaziranga environs, the sanctuary further complicated the conflict over fisheries. The locally influential individuals leased a stretch of the Mora Diphalu River from the village management committee.[243] They also allegedly fished in the sanctuary *beels* and other streams left for the village use. Although these lessees funded the local public institutions, there were growing criticisms that they profiteered several times more. More importantly, they earned the widespread notoriety of fishing inside the sanctuary. The conversion of the sanctuary to a national park took place at the backdrop of an intense rhino killing. The idea that a national park cannot allow human activities had fully won over the senior forest officials.[244] They could not imagine a 'national park' if fishing was still allowed on the Mora Diphalu. Trespass and fishing became a potent case for the FD to include the river in the park. Mahendra Mohan Chaudhury, Singha's predecessor, also supported the idea in the run-up to the conversion to a national park.[245]

Despite Mora Diphalu's inclusion in the park, Singha's assurance assuaged the peasants. They could still fish on the eve of festivals like the Bihu, Eid, and Christmas.[246] However, the newly created national park was charting a new course. On the Bohag Bihu's

[240] Replies to K. P. Agarwala's questions in the ALA, *ALAD*, Vol. I, No. 24, 3 April 1961, 145.

[241] "Murder of Mishing youths to protect the fishery mahaldar", *ALAD*, Vol. I, No. 6, 18 March 1971, 6-11.

[242] "Editorial: Fish", *Natun Asamiya*, 3 July 1956; "Editorial – Fish Shortage", *Dainik Asam*, 5 January 1974.

[243] "Illegal fish business", *ALAD*, Vol. II, No. 1, 25 October 1971, 8-11.

[244] "The Role, Management and Economic Function of a National Park with Specific Reference to Kaziranga," *Indian Forester* 95, no. 11 (November 1969): 785-791.

[245] "Illegal fish business", *ALAD*, Vol. II, No. 1, 25 October 1971, 8-11.

[246] The government, however, never revised the formal notification with Singha's assurance of domestic use of the river. As a result, confusion remained over the legal position about their rights.

Uruka[247] in 1978, park guards shot dead a fisher fishing on the Mora Diphalu.[248] The sanctuary authorities reported the incident as an "encounter against the poachers." The villagers protested in front of the local police station.[249] They claimed that the park guards shot the man and dragged the body using their elephant into the park.[250] The Kuthori villagers received loud support from several MLAs. The police arrested the accused and conducted an inquiry.[251] FD's newfound power to shoot is explained by the guards' confidence that national parks must be free from human interference.[252] The incident altered the relationship between the villagers and the park significantly. The Mora Diphalu River served the villagers as a source of fish, public institution finance, and a barrier against wildlife. The national park limited villagers' rights into un-codified 'privileges'. Even such limitations could hardly restrict the villagers from entering the sanctuary. By shooting the fisher, the park made it costly for the villagers to access their privileges. From the late 1970s, letting a fisher go free with a light penalty was a thing of the past.

Grazing, fishing, and thatch and firewood collection served as reconciliatory measures against wildlife damage on humans, cattle, and crop. As the conversion of the sanctuary to a national park became a reality, women and poor bore the biggest brunt of increasing restrictions. Guards stopped firewood collecting women and shouted "you are stealing government property".[253] Following the restrictions brought in by the national park, angry peasants shot poisoned arrows at buffalo and threw fire at the crop-raiding elephants. They

[247] *Uruka* is the eve of Bihu when the community feasts take place.

[248] "Wild animals and bird of Kaziranga National Park", *ALAD*, Vol. I, No. 29, 20 June 1978, 18-20.

[249] "Encounter with poachers in Kaziranga", *Dainik Asam*, 17 April 1978.

[250] "Resentment over Kaziranga Incident", *Dainik Asam*, 30 April 1978.

[251] "Wild animals and bird of Kaziranga National Park", *ALAD*, Vol. I, No. 29, 20 June 1978, 18-20.

[252] In 1972, guards gunned down a fisher from a north-bank village and reported it as an encounter against poachers. "Encounter with Poachers in Kaziranga", *Dainik Asam*, 3 March 1972.

[253] "Small news items from Bokakhat", Dainik Asam, 22 March 1974.

demanded that the crop-raiding animals must be killed.[254] Incidentally, in 1974-75, drought and famine hit Assam. The sanctuary's neighbourhood was a worst sufferer with a number of reported hunger death, especially old and women.[255] A reporter wrote, "… several hungry Miri [Mishing] people are reportedly roaming impatiently in the restricted areas of the national park." The angry Mishings reportedly said, "we're left with choosing between dying hungry or to the guard's bullets."[256] The guards tried their best to enforce the new restrictions, even if it meant shooting an old grass-cutter inside the park.[257]

The local middle class favoured the sanctuary's conversion to a national park. It meant pride and more development in the area. Even as they demanded greater armed protection, they hardly meant a ban on fishing, grazing, and foraging. National park's rubric hardly unravelled before them as exclusionary. Golap Khaund, a local school teacher, writer, and conservationist, condemned how the naive adoption of international conservation ideals tattered social justice in the Kaziranga environs.[258] He called for a fresh look to accommodate peasants' livelihood needs without hurting conservation goals. The national park in Kaziranga had marched far ahead to heed to these voices.

While fish and forest produce were the pivots of rural contestations, venison wired the sanctuary to urban environmentalism. Venison had a distinctive culinary and cultural status in Assam. The peasants and townspeople, poor and rich alike, hunted deer for food and fun. When the cultivation had not replaced the floodplain grassland, there was still plenty of deer. Pressure fell on the KWS as the deer was gradually becoming scarcer outside. The townsmen

[254] "Demands of Kaziranga Residents", *Dainik Asam*, 30 December 1974.

[255] "Hunger Deaths", *Dainik Asam*, 26 September 1974; "Hunger Deaths: In Every District", *Dainik Asam*, 21 October 1974.

[256] "Hungry Tribal People's Defiance" *Dainik Asam*, 6 November 1974.

[257] "Demands of Kaziranga Residents", *Dainik Asam*, 30 December 1974.

[258] Golap Khaund's "Letter to Editor", *Dainik Asam*, 18 March 1975. Khaund was an office-bearer of the Kaziranga Welfare Society, the first non-governmental conservation organisation in Assam.

drove to the KWS to hunt deer as it was approachable from the Assam Trunk Road. In the monsoon, some north bank peasants set on boats looking for deer refuging on *tapu*s. In the times of shortage, a market for deer meat emerged around the KWS.[259]

In 1956, the Government of Assam banned even licensed hunting of deer in the RFs.[260] Peasants mainly hunted during the rainy season when the deer fled the KWS in search of highland. The guards could hardly monitor hundreds of square kilometres outside the sanctuary. The peasants also hunted during the non-rainy seasons in the poorly patrolled northern peripheries. However, the guards detected only a tiny fraction of such offences. In contrast, the guards frequently caught the townspeople hunting around the Trunk Road. It was easier for the guards to apprehend on the Trunk Road as the townsmen were hardly at ease on the bushes. Gun and kill, both immutable pieces of evidence, made it difficult for the offender to plead innocent. It was not the case with fish or rhino horns. Once out of the sanctuary, it was not easy to prove that the fish belonged to it. The rhino horn, by its size, was nearly intractable. Therefore, the vulnerability of the townsmen as opposed to peasants gave a particular class tinge to illegal deer hunting. To illustrate this, we will discuss two cases where the guards detained townspeople or the influential men hunting illegally in the KWS.

In 1957, the KWS guards caught a bus owner from Jorhat dragging a deer towards his car on the Trunk Road. The Prime Minister's office received an anonymous letter demanding punishment to the offender.[261] They alleged that the offender got protection from influential people in the government. In 1961, the guards caught an advocate from Nagaon with his deer kill.[262] The accused was an influential politician's kin. The politician begged the Forest

[259] "Deer hunting in Kaziranga", *Dainik Asam*, 1 August 1967.

[260] From the US, FD to the CF, 18 January 1956, file no. For.669/55, 1955, Forest, ASA.

[261] "Jorhat Public" to the prime minister of India, 30 January 1957, file no. For/WL/80/57, 1957, Forest, ASA.

[262] "Minister's Intervention in Case Against Alleged Poacher", *The Assam Tribune*, 29 November 1961. Also see the minister's press note in response, file no. For/WL/12/61, 1961, Forest (Wildlife), ASA.

Minister to drop the charges in the court. The minister intervened, and the court acquitted the accused. *The Assam Tribune* was highly critical of the minister's interference. The incident occurred amidst the surge of illegal rhino killing in the KWS. The minister issued a press note: "such compounding would meet the ends of justice and ensure that the advocate could be won over to be a good citizen." His explanation, however, did not save him from the opposition party's salvo.[263] Assamese newspapers relentlessly chastised peasants for hunting deer during the floods.[264] However, deer hunting in KWS exposed that the urban hunters were more vulnerable than the peasants. Nature provided a new plank to question the power in a new democracy.

What constituted an offence against wildlife differed widely between the conservationists and the peasants. Forest officials and conservationists held that any act of killing rhino was a crime out of greed. In contrast, peasants explained their act based on the ecological milieu, self-defence, and subsistence needs. Besides flood and erosion, peasants spent sleepless nights guarding crops amid mosquitos and insects. Despite this, the wild animals destroyed crops and killed villagers. A student examining rhino killing in the 1990s in the KNP concluded, "often field man [informant villagers] are motivated by survival and a sense of vengeance."[265] Sishu Ram Pegu's novel *Dhansiri Gaor Dekajon* presents several such paradoxes wildlife conservation brought to the Mishings living in the KWS's eastern neighbourhood. In a plot, a few villagers discussed a rhino grazing on their field that had already gored a man to death. However, as per the law, killing it would be unlawful. Purandar, a brave and constructive young man, put an end to the dilemma. He proposed, "… if the animal does not return to the sanctuary when we chase, we will have to kill it."

[263] Draft replies to Ram Prasad Das's questions in ALA, file no. For/WL/308/62, 1962, Forest (Wildlife), ASA.

[264] "Deer Hunting in Sanctuary during Floods", *Natun Asamiya*, 5 August 1955; "Complaints of Killing Deer", *Dainik Asam*, 11 August 1970.

[265] Brett Adam Elan Brener, *An Anti-Poaching Strategy for the Greater One-Horned Rhinoceros in Kaziranga National Park - Assam, India* (Master's diss., The University of Calgary, Alberta, 1998), 67-68.

Accordingly, Purandar killed the rhino. The whole village chopped the rhino and brought home the meat without leaving any sign. On the contrary, in another plot, traders failed to lure Purandar to kill a rhino for its horn.[266] It is not to say that these notions of justice did not change. Mishing villages too produced seasoned rhino killers exclusively for money. However, one cannot deny that there was also a collective conception of justice.

In an agrarian frontier shared with wild animals, a shikari earned veneration for his skills and bravery.[267] His community members respected him for protecting them and their crop and cattle from wild animals. A respected shikari could swiftly slip into lawlessness, like killing a rhino for money. However, it did not deter him from occupying prestigious socio-cultural positions such as a priest.[268] Rhino killers, despite their infamy, left behind heroic legends too. While interviewing Old Shikari, one of his younger relatives repeatedly prodded him to retell specific legends. Old Shikari narrated how once he burnt a forest camp in broad daylight. This act was neither revolutionary nor aiming at reform in denial of resources. However, as Hobsbawm explains, in the case of the peasant bandits, "… they cannot abolish oppression. However, they do prove that justice is possible, that poor man need not be humble, helpless and meek."[269] One morning in 1957-58, the deputy ranger reportedly woke up to see deer legs hanging in front of his office.[270] We do not know the doer's motifs. These incidents are unlikely to appear anything more than crime in official records. As Steven Feierman notes, "There is good reason for everyday resisters to *avoid* stating their intentions openly if they are to be effective … For resistance to be effective, it *must* frustrate the

[266] Sishu Ram Pegu, *Dhansiri Gaonor Dekajon* (Bokakhat: Puwoti Sahitya Sabha, 2006), 33-35, 56.

[267] Pegu lists several shikaris from the KNP's eastern neighbourhood. Pegu, *Dhansirmukhar Katha*, 30-35.

[268] At least one seasoned rhino killer until the 1980s is a priest.

[269] Eric Hobsbawm, *Bandits* (London: Abacus, 1969), 61.

[270] "Encounter with Poachers", *Natun Asamiya*, 2 September 1958.

historian".[271] In times of shortage and crisis, these forms of defiance took more open and severe practices. The open deer market that thrived during the crises years of the mid-1960s is only one example.

Conclusion

After the independence, there was a rethinking of wildlife conservation, both at the national and state level. The Government of Assam tried to popularise the rhino and the KWS. However, the conservationists at the IBWL doubted the states' intentions and ability to protect wildlife. Such fears led them to seek greater power for the union on wildlife matters. The Government of Assam remained suspicious of such moves and yielded very little to the IBWL. In the early 1950s, it differed on more occasions than concurred with the IBWL's ideas. It refused to uniform national park law, involve IBWL in its wildlife management, and disarm the peasants.

Nevertheless, the IBWL and the FD officials agreed that grazing and other resource use blotted the pristine in a sanctuary. They put forth scientific claims to the hazards of livestock grazing in a wildlife sanctuary. However, the grazier, *not* grazing was their most significant concern. Despite alarmist rhetoric against the hazards of grazing to the wildlife, the conservationists could not adduce cogent scientific evidence. Instead, their contempt towards grazing had a strong cultural preference that saw wilderness as void of human intrusion. However, the FD looked at the issue expediently. It allowed grazing in the south as a conciliation measure against wildlife damage on humans and property. On the other hand, it needed some graziers in the poorly patrolled northern periphery. Similarly, although the FD stopped commercial fishing, it allowed public institutions to fish limitedly. Besides, the

[271] Steven Feierman, *Peasant Intellectuals: Anthropology and History in Tanzania* (Madison: University of Wisconsin Press), 42 (italics in original) cited in Neumann, *Imposing Wilderness*, 46.

fishers and forest produce collectors defied the restriction through the locally formed meaning of resource and crime. Electoral politics played its role in keeping alive these resource uses in the sanctuary. These concessions changed drastically in the wake of the severe assault on the rhinos in the 1960s.

Increasing pressure on the sanctuary mirrored the massive agrarian upheaval in the Kaziranga environs throughout the 1950s. Flood and erosion distraught the KWS's vicinity and forced the landless peasants to clear the buffers. Repeated floods, erosion, disease, and depredation by wildlife increased peasants' dependency outside cultivation. The sudden spike in rhino killing in 1960-61 was in this backdrop of agro-ecological changes. However, it gave cultural and political overtones to infant environmentalism in Assam. Such shifts in Assam's culture and politics gave a useful plank to the FD to loosen the sanctuary's agrarian connections. The government not only found it convenient to remove the graziers and fishers, but it also took the KWS into a path of more militarised protection.

In the late 1960s, KWS looked similar to what the IBWL desired. However, it followed a different path than what the IBWL guided. It remained firmly within the state's politics. The next chapter discusses how the 1970s gave the Union government an unprecedented say in wildlife matters. These changes plucked the sanctuary from the local and regional context and put it in the national forum.

Chapter 4: Law, Conservation, and the Agrarian Environments (1972-2020)

> The greatest of all fictions is that the law itself evolves, from case to case, by its own impartial logic, true only to its own integrity, un-swayed by expedient considerations.[1]
>
> E. P. Thompson

Introduction

The chapter 3 discussed how the Government of Assam defended its power over forest and wildlife from the Union government in the 1950s. Come the 1970s, a series of legislative and constitutional changes gave the Union government of India a significant say in wildlife conservation. Amongst others, these three stand out: the WLPA, transfer of forest and wildlife from the State List to the Concurrent List, and the Forest Conservation Act, 1980. Indira Gandhi's Prime Ministerial years (1967–77 and 1980–1984) are seen as the era of ecological sensitivity in India.[2] The WLPA, enacted under her tenure was instrumental in providing a legal framework that shaped the Indian wildlife management and jurisprudence in the decades to follow. India established a vast chain of national parks from the 1970s, but the questions related to community rights took a backseat.[3] Rangarajan assessed that Indira Gandhi's ecological engagement had "empathy for underclass, but less of recognition of rights than careful dispersal of patronage".[4] Thus, Indian national parks hardly manifest the human-centred environmentalism that Indira Gandhi eloquently espoused.[5] However, extant

[1] E. P. Thompson, *Whigs and Hunters: The Origins of the Black Act* (London: Penguin Books, 1975), 250.

[2] Rangarajan, *Nature and Nation*, 151-189; for two recent accounts, see Ramesh, *Indira Gandhi*, and Ranjitsinh, *A Life with Wildlife*.

[3] Rangarajan, *Nature and Nation*, 246.

[4] Rangarajan, *Nature and Nation*, 182.

[5] Lewis, "Globalizing Nature", 237.

scholarship does not answer why and how the rights of the cultivators, forest dwellers, and pastoralists took a backseat.

Neither do we get a cue to this question in the contemporary debates on conservation issues. Debates on wildlife conservation focus mainly on science[6] and law[7]. This can be attributed to the parallel rise of the two in the domain of wildlife conservation from the 1970s. As the introduction of this thesis discussed, science and law did not always agree. However, they fed each other to extricate the wildlife reserves to a great extent from the agrarian milieu. With vast legal and scientific interests on conservation, the agrarian world has relapsed into the obscurity from academic engagement. This chapter foregrounds the agrarian connections of the working of the conservation laws in the KNP. The WLPA has been vital in shaping the contemporary conservation practices. So we need to revisit the guiding ideas and processes at work in enacting the WLPA and its career. It is important to recognise who and how a piece of law benefitted, instead of merely its stated aim.

Law-making and implementation are often inconsistent processes. Colonial rule bent the laws to facilitate colonial capital.[8] It bypassed the 'rule of law' to condone the white racial violence against Indians.[9] Radhika Singha points out to many cracks in the colonial law-making and jurisprudence that deliberately aimed to support the administration instead of commitment to its own promise of rule of law. Colonial government constructed 'Thugee' as a hereditary profession to criminalise itinerant groups. It helped to overcome the failure to

[6] Shahabuddin, *Conservation at the Crossroads*; K. Ullas Karanth, *A View from the Machan: How can Science Save the Fragile Predator* (Ranikhet: Permanent Black, 2006); M. D. Madhusudan et al, "Science in the wilderness: the predicament of scientific research in India's wildlife reserves".

[7] Navin Thayyil, "Judicial Fiats and Contemporary Enclosures," *Conservation & Society* 7, no. 4 (2009); Shomona Khanna, *Exclude and Protect: A Report on the WWF case on wildlife conservation in the Supreme Court of India* (New Delhi: SHRUTI (Society for Rural Urban and Tribal Initiative), 2008); Sivaramakrishnan, "Environment, Law, and Democracy in India"; Geetanjoy Sahu, *Environmental Jurisprudence and the Supreme Court: Litigation, Interpretation and Implementation* (New Delhi: Orient BlackSwan, 2014).

[8] Dey, *Tea Environments and Plantation Culture*, 133-164.

[9] Kolsky, *Colonial Justice in British India*, 142-184.

establish the individual liability of a crime by proving that the accused belonged a criminal group.[10] In reality, the 'thugs' were peasants who dabbled as militias for warring pre-colonial states. As the British took over and doused the feuds, the jobless militias took to road robbery. Indifference to the historical making of such criminal identities resonates strongly in the working of the law and judicial deliberations in the KNP.

As discussed in chapter 3, throughout the post-independent period, displaced by flood and erosion, peasants cleared KNP's buffers in search of land. These 'ecological victims' tolerated by the local moral economy ceased to be so when the KNP was drawn into the national discourse of wildlife conservation and environmental jurisprudence. Instead, the conservation discourse and popular media dubbed them as KNP's 'injurious neighbours'. This chapter shows that the peasants' criminalisation was rooted in the valley's agrarian history, ecological dispossession, and bureaucratic lapses in land acquisition procedures. It begins by showing how the guiding framework of wildlife conservation in India was a product of the 1970s' politics when the parliamentary deliberative processes took a backseat. The WLPA embodied the cultural idea that nature can be protected only by removing the human interferences. Its subsequent amendments withered the autonomy of the state governments in wildlife matters. The battle over agrarian rights around the KNP increasingly shifted to the courtroom. The second section shows how the procedures laid in the WLPA to safeguard the peasants' rights went unnoticed in the judicial considerations. The last section shows that popular narratives often informed the critical judicial deliberations, whereas the historicity of peasants' identities and their marginal position did not.

[10] Singha, *A Despotism of Law*, 168-220.

Law, Federalism, and Wildlife Protection

Chapter 3 discussed how the IBWL tried to centralise the wildlife governance at the Union government in the 1950s. When wildlife-rich states like Assam strongly resisted those moves, the conservationists in the IBWL took recourse to census-based advocacy. Spillett's census in several sanctuaries, including the KWS in 1966, was a crucial milestone in this direction. Spillett's census gave a miss to science and reason. He drew his conclusions based on the Anglo-American cultural views about wilderness long shared and cherished by the conservationists like E. P. Gee. In this section, we will discuss how from the late 1960s, the conservationists' advocacy and alarmist rhetoric found a fertile political milieu to inscribe their vision of wildlife protection in the WLPA. Along with other developments in the 1970s, the law provided a language and vocabulary for the Union government's interference in governing the wildlife and the state's corresponding marginalisation. Numbers and rhetoric both played a vital role in the transition from the 1960s to 1970s.

In the 1960s, the threat to wildlife, especially the declining tiger population, received strong interest. In 1967-68, Gee estimated less than 4,000 tigers surviving in India, down from 40,000–50,000 at the start of the century. J. C. Daniel of the BNHS modified the count to 1,500–2,500.[11] As the Government of Assam controlled rhino killing in the KWS, the pressure shifted to the North Bengal sanctuaries.[12] If the evidence did not suggest a threat, conservationists looked the other way. Paul Joslin, an American graduate student, concluded that the removal of livestock would starve the Gir lions by reducing their prey base. Joslin's conclusion did not confirm his donor's wisdom. So they forced him to focus on how domestic

[11] J. C. Daniel, "The Tiger in India: An Enquiry 1968-69," *JBNHS* 67, no. 2 (August 1970): 227-234; Kailash Sankhala, of Indian Forest Service later put the numbers at 2000. Sankhala, *Tiger!*, 12.

[12] For rhino killing data in the KWS, see Yadava, "Detailed Report", chapter 7; during 1968–1972, 32 rhinos were killed in Jaldapara and Gorumora Wildlife Sanctuaries in North Bengal. Esmond B. Martin, "Smuggling Routes for West Bengal's Rhino Horn and Recent Successes in Curbing Poaching," *Pachyderm*, 1996: 28-34.

livestock threatened the Gir lions.[13] The decade also saw the production of some classics and a profusion of books and popular articles, often with panic-stricken titles like *Twilight of India's Wildlife* and *Can India Save Her Wildlife?*[14]

Prime minister Indira Gandhi was the go-to person for everyone concerned with wildlife protection—ecologists, hunters, and nature lovers.[15] Rangarajan sums up, she "gave them an ear and much more, a milieu in which their ideas acquired force and momentum."[16] The conservationists' efforts to highlight the depleting wildlife in India led to the IUCN General Assembly in New Delhi in November 1969.[17] Indira Gandhi eloquently expressed the need to preserve the environment and wildlife in her oft-quoted speech in the Assembly.[18] The IUCN Assembly proved to be a milestone in India's wildlife conservation, especially the tiger.[19] Five months ahead of the Assembly, she revived the almost defunct IBWL. She formed an expert committee under Dharmakumarsinhji to assess the state of India's wildlife.[20] The report proposed a national policy and restated conservationists' demand that the Union government should take over wildlife.[21] However, Indira Gandhi had already faced a constitutional barrier trying to implement this longstanding proposal. Only states could pass laws and manage sanctuaries. Despite the Rajasthan state government's agreement, the union

[13] Lewis, *Inventing Global Ecology*, 207-209.

[14] Gee, *Wildlife of India*, is a classic; others include P. D. Stracey, *Wildlife in India: Its Conservation and Control* (New Delhi: Ministry of Agriculture, Government of India, 1965); Balakrishna Seshadri, *The Twilight of India's Wild Life* (London: John Backer, 1969); The leading newspapers also carried articles on vanishing animals, for example, Zafar Futehally, "Wild Life: Not by Legislation Alone," *Times of India*, 4 October 1966; P. D. Stracey, "Can India Save Her Wildlife?" *Times of India*, 23 November 1969.

[15] Alvin P. Adams, an American hunter, wrote to her about the "rapidly depleting big game population". Salim Ali gave her regular updates of his laboratory Keoladeo Ghana in Rajasthan. Ramesh, *Indira Gandhi*, 79-82.

[16] Rangarajan, *Nature and Nation*, 169.

[17] Lewis, *Inventing Global Ecology*, 63.

[18] Excerpt of Indira Gandhi's address at IUCN General Assembly, 1969, cited in Ramesh, *Indira Gandhi*, 87.

[19] WWF started its India office, and Project Tiger began four years later. Lewis, *Inventing Global Ecology*, 63.

[20] Ramesh, *Indira Gandhi*, 81-84.

[21] IBWL, *Wildlife Conservation in India: Report of the Expert Committee* (New Delhi: IBWL, 1970).

could not take over the Keoladeo Ghana.[22] So she had to settle by asking the chief ministers to pass wildlife legislation.[23] Maharajas of the princely states with constitutional privileges often frustrated her desire to control hunting.[24] In 1970, she faced stiff resistance from within the Congress Party against abolishing such privileges.[25] However, come the new decade, her persona and politics had radically changed.

In March 1971, Indira Gandhi returned to power, winning nearly two-thirds seats in the Lok Sabha. In September 1971, Indira Gandhi called a meeting to discuss wildlife with government officials and conservationists. Billy Arjan Singh, a hunter-turned-conservationist from Uttar Pradesh, Zafar Futehally of BNHS and Anne Wright of the WWF-India attended the meeting.[26] M. K. Ranjitsinh, a Madhya Pradesh cadre IAS officer in union deputation, suggested that Article 252 of the Constitution allowed the union to legislate on a matter in the State List. It required at least two state legislatures to pass a resolution empowering the union to pass an Act. Indira Gandhi promptly moved the 32-year-old Ranjitsinh to the Union government's wildlife preservation wing.[27]

Historians have analysed the roles of political leaders, nature writers, and ecologists in tracing India's environmentalism and biodiversity conservation ideals.[28] However, very rarely has the role of a bureaucrat at the helm of critical affairs like drafting a law subject to

[22] Ramesh, *Indira Gandhi*, 80, 96.

[23] Ramesh, *Indira Gandhi*, 84.

[24] Her appeals to the Maharaja of Bharatpur to desist from shooting failed. Ramesh, *Indira Gandhi*, 80, 96.

[25] The bill to abolish Maharajas' privileges failed to receive the two-thirds majority in the Rajya Sabha embarrassed Indira Gandhi. Granville Austin, *Working a Democratic Constitution: A History of the Indian Experience* (New Delhi: Oxford University Press, 1999), 220-231.

[26] Ramesh, *Indira Gandhi*, 116; Ranjitsinh, *A Life with Wildlife*, 112-114.

[27] Ranjitsinh, *A Life with Wildlife*, 112.

[28] See the chapters on Mahatma Gandhi, Jawaharlal Nehru, Indira Gandhi and five nature writers in Rangarajan, *Nature and Nation*; Lewis, *Inventing Global Ecology*, analyses the role of Indian ecologists like Madhav Gadgil, A. J. T. Johnsingh, Raman Sukumar and Ravi Chellam.

enquiry.[29] When read alongside the curator's biography, a piece of legislation is more likely to illuminate the objectives, and the cultural taste etched on it. Ranjitsinh is credited to be the architect of the WLPA. Born in the Wankaner princely family (in present-day Gujarat), he joined the IAS in 1961. He grew up watching and appreciating wildlife in a milieu where the hunting and wildlife were deeply embedded in the idea of the rulers. Wildlife and Hunts were crucial avenues for the princely states to negotiate their political power circumscribed by colonial rule.[30] Ranjitsinh's memoir, *A Life with Wildlife*, recounts how Maharajas' "selfishness and braggadocio resulted in most stringent protection of wildlife."[31] He hails their strict restrictions against grazing, forest produce, and even trespasses through preserves. The account is packed with a sense of loss when the preserves were merged with the state forest departments after India's independence. His unqualified praise for the Maharajas and view that democracy was hostile to India's wildlife shuns the reality. In independent India, two of the three mega-faunas (rhinoceros, tiger, and lion) thrived outside the princely states.[32] Secondly, his own examples do not suggest a linearly rich faunal past in the princely states.[33] Nevertheless, he found placing the wildlife matters in the Constitution's State List was a "cardinal mistake".[34] Ranjitsinh believed that democracy like India cannot protect wildlife without efforts from the "top".[35] He saw immense hope in uniform wildlife legislation. In short, Ranjitsinh embodied the wildlife discourse espoused by conservationists for two

[29] For a brief account of Ranjitsinh's role in drafting the WLPA 1972 and his cultural background, see Lewis, "Globalizing Nature," 228.

[30] Hughes, *Animal Kingdoms*, 4.

[31] Ranjitsinh, *A Life with Wildlife*, 4.

[32] The rhino made a remarkable comeback in the KWS from a few heads in the 1900s to 400 in 1966. A home to ungulates and tiger, Kanha, Madhya Pradesh, was considered one of the finest wildlife habitats in the 1950s and 1960s. Schaller, *The Deer and the Tiger*, 8.

[33] In 1928, Lakshman Singhji, the Dungarpur ruler, re-introduced and protected tigers once vanished from his state. Ranjitsinh, *A Life with Wildlife*, 18.

[34] Ranjitsinh, *A Life with Wildlife*, 3-4.

[35] Ranjitsinh, *A Life with Wildlife*, 52.

decades. With immense support from none other than Indira Gandhi, Ranjitsinh was giving birth to a whole new era in India's wildlife conservation.

Indira Gandhi was convinced about the need for uniform legislation to preserve wildlife. She wrote to the chief ministers, and at least eleven of them responded favourably.[36] However, wildlife-rich states like Assam and Mysore did not reply.[37] Ranjitsinh's draft bill reflected his deep understanding of Indian wildlife as much as his bureaucratic deft.[38] The bill outlined separate schedules for wildlife as per their vulnerability, provisions for opening national parks and wildlife sanctuaries, a dedicated wildlife bureaucracy, and restrictions on hunting and wildlife trade. The bill essentially envisioned a complete exclusion of the humans in the national park and limited access to the sanctuaries. Ranjitsinh's bill took no account of George Schaller's ecological study on the Kanha National Park, where he was closely associated as the district collector. Schaller, who began with a premise of complete separation of humans and wildlife, gave some surprising conclusions. He found that immediate removal of livestock from the park would starve the tigers. He suggested phase-wise removal.[39] Ranjitsinh lauds the princely rulers' compensation against wildlife damages, but it did not find a place in the bill.[40]

A junior minister in the Ministry of Agriculture introduced the bill in the Lok Sabha (lower house of the parliament) on 21 August 1972.[41] The bill came in a poorly attended afternoon session with only two hours earmarked for discussion. While the house was nearly unanimous in favour of wildlife legislation, members differed on the bill's provisions.

[36] The number of states who reportedly agreed with the Union government to bring a new law on wildlife varies in various sources. 11 in Ramesh, *Indira Gandhi*, 126; 18 in Ranjitsinh, *A Life with Wildlife*, 118.

[37] Birendra Singh Rao in Lok Sabha Debates, Fifth Series, Vol. XVIII, No. 15, 21 August 1972, 137.

[38] As the debates in both the houses indicate no important amendments, the Act itself resembled the bill. See Wildlife (Protection) Act 1972, published in The Gazette of India (Extraordinary), 11 September 1972.

[39] Schaller, *The Deer and the Tiger*, 328-329.

[40] Ranjitsinh, *A Life with Wildlife*, 18-19.

[41] For discussions on the bill, see Lok Sabha Debates, Fifth Series, Vol. XVIII, No. 15, 21 August 1972.

Dasarath Deb, a Communist Party of India (Marxist) member and later Chief Minister of Tripura (1993-1998), feared that land acquisition for national parks or wildlife reserves would not compensate the shifting cultivators as they do not possess land titles. The opposition members of parliament (MP) protested the ban on tribal hunting for food and shifting cultivation while still allowing trophy hunting. Despite their support for the bill, several MPs, including those from the ruling party, demanded to send it to a Select Committee. A Select Committee could carefully discuss the clauses and make those effective to the country's diversity. However, the government refused to send the bill to a Select Committee. Karan Singh, the Minister of Tourism and Civil Aviation, and IBWL Chairman, instead of the concerned ministers, tried to allay the MPs' doubts. Singh argued that the wildlife was so rapidly depleting that a Select Committee's spell of review would prove costly. He referred to the recent tiger estimation, which showed a sharp decline in their numbers. The year was also marked by a wanton slaughter of rhinos in the North Bengal sanctuaries. The Lok Sabha passed the bill within three hours without any major amendments to the objection on traditional hunting and land acquisition. The bill was tabled a week later in the Rajya Sabha. The house's mood was acrimonious, and the opposition felt that the government was hostile to a discussion. An opposition member decried if the Chairman could give them "protection against the wild animals in the Treasury Benches." A few members pushed for sending the bill to the Select Committee. The government had a ready answer as in the Lok Sabha—any delay would cost heavily. The Rajya Sabha passed the bill with a quicker discussion than in the Lok Sabha.[42]

Indira Gandhi directly oversaw the brief drama staged in the parliaments. The day Rajya Sabha discussed the bill, she asked Ranjitsinh to allay the fears of the unhappy tribal MPs. An anxious Ranjitsinh told Indira Gandhi, "I hope the bill will be passed in this session

[42] Rajya Sabha Debates, Session No. 81, Part II, 26 August 1972, 6-50.

of Parliament and not referred to the Select Committee." She assured, "of course it will be passed in this session." Ranjitsinh met the members, explained his bill, and ensured that "they did not oppose the bill in the parliament."[43] It was typical of the third term (1971–1977) of Indira Gandhi as the prime minister. As historian Granville Austin summed up, her grip over the parliamentary party far exceeded the power enjoyed by any of her predecessor prime ministers. The executive branch effectively nullified the identity of the parliament.[44] Ranjitsinh's wildlife bill escaped the parliamentary review. In other words, the Act retained Ranjitsinh's bureaucratic curatorship with deep imprints of his princely cultural roots in toto. However, the context was no less important.

Indira Gandhi had already emerged as a champion of environmental protection. Her address in the IUCN General Assembly in New Delhi brought new hopes to the international conservation circle. She attended the United Nations Conference on Human Environment in Stockholm, Sweden, 5-16 June 1972. She was the only head of government attending the conference other than the Swedish host.[45] Dates are important. Indian parliaments discussed the wildlife bill from 21 August 1972 and got the presidential accent in less than three weeks (9 September). An Indian delegation under Ranjitsinh was heading to the IUCN General Assembly in Canada a week later.[46] Indira Gandhi had taken a series of executive steps like banning tiger hunt and wildlife trade. International bodies like IUCN valued national wildlife legislation.[47] WLPA gave Indira Gandhi's words greater credibility. What could have been a better forum than the IUCN General Assembly to tell the world about India's success?

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[43] Ranjitsinh, *A Life with Wildlife*, 124.

[44] Austin, *Working a Democratic Constitution*, 174.

[45] Karan Singh in Lok Sabha Debates, Fifth Series, Vol. XVIII, No. 15, 21 August 1972.

[46] Ranjitsinh, *A Life with Wildlife*, 124-25.

[47] One of the primary focuses of the IUCN was the enactment of national wildlife legislation by the member countries. IUCN, *Eleventh General Assembly: Proceedings* (IUCN: Banff, 1972), 149.

Domestically, the WLPA upgraded the union from its advisory role to a policymaker over wildlife matters. The Act brought the diverse ecological contexts in which humans and wildlife interacted in India's zoogeography under one umbrella. The law was the fruition of the ideal that national parks should be free from all human interference. The evidence of interdependence between the wildlife and agrarian world was of little value. The Assam Legislative Assembly enacted Assam National Park Act 1969 (ANPA) based on the regional environmentalism that influenced the state's politics. The ANPA provisioned for retaining the recorded grazing rights under section 7(3), which the WLPA summarily dismissed. As discussed in chapter 3, the settlement of the rights during the formation of the KNP borrowed from the ideological tenets of the WLPA. The WLPA's clauses on land acquisition and hunting (opposed in the parliamentary debate) are central to our later discussion on the KNP. Meanwhile, the WLPA was going to give the union significantly greater say on wildlife matters. It explains why Assam was one of the last states to ratify the WLPA and only after Indira Gandhi's considerable pressure.[48]

There are diverse positions on the working of the WLPA. Chhatre and Saberwal pronounce the law itself as guilty, as it "has proved hopelessly inadequate in dealing with the complex web of competing interests in and around the GHNP and untangling it in the interests of conservation."[49] Besides, they observe that in the GHNP, the 'spirit of the law' received heavy jolt from the developmental and political interests. Michael Lewis assesses the implementation of the WLPA as an incomplete project of what was envisioned in 1972.[50] Lewis calls the Indian state an "uncertain state" which is "simply not sure of which policy to pursue". While the law soothed the international environmental agencies and governments

[48] Indira Gandhi wrote to Sarat Chandra Singha, chief minister of Assam on 15 May 1975, Ramesh, *Indira Gandhi*, 212; Assam ratified the WLPA on 27 January 1977, four and half years after it was enacted.

[49] Chhatre and Saberwal, *Democratizing Nature*, 107.

[50] Lewis, "Globalizing Nature," 236-237.

could displace people, some of the poorest people continue to live within the national parks. As shown above, the legislative process—that eschewed any serious deliberation—was hardly intended to address the complex and diverse set of interests in the protected areas. Instead, the WLPA was a fruition of conservationists' long-cherished wish to transfer the wildlife from the custody of the states to the Union government. To this end, although ambitious, the piece of law was the critical first step to interrupt the regional state's sole control over wildlife. It gave a new language and vocabulary for the Union government and judiciary to intervene in wildlife protection matters in the decades to follow. Though the WLPA's vision of creating wilderness in the PAs has been incompletely realised as argued by Lewis, it set the PAs like KNP on a march towards this *telos*.

The other changes in the 1970s that reinforced the conservationists' WLPA were the Convention on International Trade in Endangered Species (CITES) and the forty-second constitutional amendment in 1976 transferring the forest and wildlife to the Concurrent List. Such changes severely curtailed the Government of Assam's freedom over forest and wildlife, which it defended from the Union government's intrusion in the 1950s and 1960s.[51] Analysing this shifting power scale is crucial to understanding the Government of Assam's increasing marginalisation in wildlife policy issues and mediating park-people relationships.

Let us begin with the Government of Assam's restricted prospects from the wildlife trade. Assam earned substantially by selling rhino horns acquired from dead rhinos or through confiscations.[52] The WLPA itself was not a deterrent until its further amendment in 1982. But the primary challenge came from India's signing the CITES in 1976. In the same

[51] In the 1970s, the union imposed President's Rule on the states more frequently than previously. Indira Gandhi's government passed the forty-second amendment during the emergency (1975–1977) when there was no opposition.

[52] In 1973-74, the Government of Assam auctioned 17 kg of rhino horn for Rs. 2.19 lakh, and in 1975, 62kg for Rs. 7.38 lakh. "Horn Auction", *Dainik Asam*, 20 February 1975.

year, the convention listed rhino in 'Appendix I'.[53] The CITES's fundamental principle states that:

> Appendix I shall include all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorized in exceptional circumstances.

Despite the CITES restriction, the Government of Assam auctioned rhino horns in 1978 for the last time.[54] In the 1980s, union officials like Ranjitsinh and Samar Singh held influential positions in the CITES.[55] Their simultaneous positions in the Union government made it possible to restrict Assam's export of rhinos (alive).[56] The union was poised to play a more significant role on flagship species like the rhino. This shifting balance of power is most apparent in the 'Rhino Re-introduction Program'.

Two large (Kaziranga and Chitwan National Parks) and six smaller isolated habitats were home to the rhino (*Rhinoceros unicornis*). Threat from the flood, erosion, and killing in the KNP pushed the idea of alternate habitat. In 1979, the IUCN's Asian Rhino Specialist Group (ARSG) resolved to create "as many viable population units as possible" for the three species of the Asian rhinos.[57] The KNP officials were unwilling to relocate its rhinos to other habitats even within Assam.[58] Stellar importance the park began to enjoy as conservation and

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[53] Pushp Jain, *CITES & India* (New Delhi: TRAFFIC-India, WWF-India & Ministry of Environment & Forest, 2001), 19.

[54] Assam Forest Department, *Status Report on Kaziranga National Park* (Assam Forest Department, 1996), 11; although the price increased fourfold in 1980, it could not sell its horns. S. P. Shahi, "A Note on Kaziranga," *Cheetal* 23, no. 4 (1984):11.

[55] Jain, *CITES & India*, 51-52, 180-182.

[56] During 1947-1960, Assam exported 23 rhinos earning around Rs. 3,00,000, "Rhinos in Assam *vis a vis* Kaziranga Reserve Forest", *ALAD*, Vol. 1, No. 26, 6 April 1961, 335-337; In 1979, the IBWL appointed committee recommended that the export should stop, Samar Singh and Kishore Rao, *India's Rhino Reintroduction Programme* (New Delhi: Department of Environment, Government of India, 1985), 19.

[57] R. Schenkel and L. Schenkel, "The Asian rhinos are also under threat," *IUCN Bulletin* (Jan-Feb 1980): 14.

[58] Parama Lahan's (DFO, KNP) "Letter to Editor" *Dainik Asam*, 19 September 1975.

tourist site partly explains their reluctance.[59] The Union government chose Dudhwa National Park, Uttar Pradesh, as the re-introduction site for its swampy grassland and evidence of rhino presence in the historical time.[60] However, the WLPA itself came on its way.

The WLPA listed the rhino in Schedule I beside other threatened animals like the lion and tiger. Section 9 (1) of WLPA states that "no person shall hunt any wild animal specified in the Schedule I". While the state government could still permit it under section 12, political instability in Assam posed a severe threat. From 1979, the Brahmaputra Valley of Assam went into the anti-foreigner agitation.[61] As the news related to translocation circulated,[62] angry outbursts flooded the local newspapers.[63] The protest against rhino translocation united with the agitation's mood to 'preserve the existence of Assam'. In April 1982, Indian parliaments amended the WLPA to enable the rhino translocation for 'scientific management'. Echoing the protests, the Assam MPs opposed the bill in parliament.[64] By inserting the following clause, the amendment gave the Union government complete discretion over translocation of a Schedule I animal.[65]

> Provided that no such permit [for capture and translocation] shall be granted-
> a) in respect of any wild animal specified in the Schedule I, except with the previous permission of the Central Government, …

[59] For American biologists' interest in KNP, see Lewis, *Inventing Global Ecology*, 95, 164; tourists footfall increased from 925 in 1956-57 to 10,106 in 1968-69. See Das, "The Role, Management and Economic Function of a National Park with Specific Reference to Kaziranga", 788.

[60] John B. Sale and Samar Singh, "Reintroduction of greater Indian rhinoceros into Dudhwa National Park," *Oryx*, 1987: 81-84.

[61] Sanjib Baruah, "Immigration, Ethnic Conflict, and Political Turmoil-Assam, 1979-1985," *Asian Survey*, 1986.

[62] "Kaziranga Rhinos will have a New Home in Dudhwa, UP", *The Assam Tribune*, 11 November 1981.

[63] See D. N. Baruah's (United Kingdom) "Letter to Editor", *The Assam Tribune*, 19 February 1982.

[64] Biswa Goswami and Dinesh Goswami asked the Chairman to record their dissent. Rajya Sabha Debates, Session no. 122, Part II, 6 May 1982, 67-83.

[65] Inserted by Act 23 of 1982, w.e.f. 21 May 1982.

The protests against translocation only increased.[66] The union officials who led the program feared that soon Assam might lose all its rhinos.[67] During the unrest, the Laokhowa Wildlife Sanctuary, 50 km downstream from the KNP, lost all its rhinos. After some foot-dragging, the Assam chief minister Hiteswar Saikia approved the translocation programme in October 1983.[68] Saikia's position was too shaky to defend Assam's popular sentiments.[69] Despite his approval, there was a change in the rhino catching site. Amidst the unrest, the 200 KM road from KNP to Guwahati Airport appeared rather risky. So Pobitora Wildlife Sanctuary, only 60 km east of Guwahati, was chosen to catch rhinos.[70] On 30 March 1984, five rhinos were flown from Guwahati to Delhi under tight security and then taken by road to Dudhwa. While many in Assam protested, the mission received loud cheer in the national media.[71]

Dudhwa has seen an impressive recovery of rhino population that went extinct from here 150 years ago.[72] It is especially so when seen in the light of a series of failures in re-introducing mega-fauna like the Asiatic Lion and Barasingha.[73] Despite such a success, the

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[66] Chidananda Saikia, "Translocation instead of protection to the Kaziranga National Park?," *Tinidinia Batori*, 11 June 1982.

[67] In 1983, 91 rhinos were killed in Assam, of which 36 alone were in the KNP. T. N. Khusoo's note, file no. 7-15/79-FRY(WL) (Vol. III), 1979, Department of Environment (DoE), GoI, Abhilekh Patal, NAI.

[68] Singh and Rao, *India's Rhino Reintroduction Programme*, 11.

[69] Saikia was elected through an election boycotted en-mass. Baruah, "Immigration, Ethnic Conflict, and Political Turmoil-Assam, 1979-1985," 1200.

[70] Samar Singh, "Rhino Conservation Program", file no. 7-15/79-FRY (WL) (Vol. III), 1979, DoE, GoI, Abhilekh Patal, NAI.

[71] "Rhinos arrive at Dudhwa Park", *The Times of India*, 2 April 1984.

[72] Despite initial challenges related to injury and deaths, Dudhwa today is home to about forty rhinos. R. Sharma and M. Gupta, *Status and Monitoring of the Greater One-Horned Rhinoceros in Dudhwa National Park* (New Delhi: WWF-India, 2015); after re-introduction of rhinos from Assam and Nepal to Dudhwa, re-introductions were done in Nepal from Chitwan to Bardia. Sale and Singh, "Reintroduction of greater Indian rhinoceros into Dudhwa National Park," 84.

[73] In the 1950s, the IBWL considered introducing rhino in Periyar or Mudumalai Sanctuary. As Periyar was never home to rhino, the plan never took off. Gee, "The Management of India's Wild Life Sanctuaries and National Parks - Part IV," 470-72; attempts in the 1950s to translocate lions from the Gir Forest, Gujarat to Chandraprabha Sanctuary in Uttar Pradesh failed in the long run despite initial success. Rangarajan, *Nature and Nation*, 113-14; re-introducing barasingha from Kanha National Park to Bandhavgarh failed. Kunal Verma,

program strayed from its stated objective. Transfer of the Pobitora rhinos was not only removed from the objective of creating more homes for the rhino but self-defeating. Pobitora, declared as a wildlife sanctuary in the late 1960s, had begun to take shape.

What conclusions can we draw from the rhino re-introduction programme? First, the programme was a demonstration of the 'Indian' expertise. It involved intense bureaucratic engagement, international collaborations, technological expertise[74] and dodging political resistance. Union officials effectively leveraged Indira Gandhi's sympathy for wildlife and her autocratic style.[75] Their enthusiasm to showcase an Indian innovation is evident in their attention to publicity. Apart from wide publicity in the newspapers, wildlife magazines, and journals, they published 1,000 copies titled *India's Rhino Re-introduction Programme*. The report went to print although two rhinos from Assam collapsed and adding more rhinos from Nepal was still under process. Secondly, the episode is also a testimony to the ability of a particular class in the Indian bureaucracy to effect crucial changes in nature conservation. Indira Gandhi reposed trust in the bureaucrats from a similar socio-political background and ecological thinking to manage wildlife. Samar Singh, who led the translocation, belonged to the Dungarpur princely family. If Ranjitsinh created a framework in which the jurisdiction of wildlife management shifted towards the Union government, Samar Singh brought those to fruition. Lastly, the programme signalled the Union government's ability to enforce its will on wildlife matters even if it went against the state bureaucracy's likings, popular sentiments, and stated scientific objectives. Mega-fauna like rhinos had to meet the national expectations

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"Rhinos from Pobitara Sanctuary in Assam relocated to Dudhwa National Park in UP," *India Today*, 30 April 1984, https://www.indiatoday.in/topic/rhino%20assam%20dudhwa.

[74] For the first time, a modern technique of drug immobilisation was used, a rare among the Greater One-horned Rhino. Sale and Singh, "Reintroduction of greater Indian rhinoceros into Dudhwa National Park," 82.

[75] Samar Singh sent a disproportionately high share of demi-official letters (written to achieve an official goal through personal relationships). With WWF and IUCN's help, Singh flew Dr John Condy, a renowned wildlife doctor from Zimbabwe, to Dudhwa to treat an injured rhino, file no. 7-15/79-FRY(WL) (Vol. III), 1979, DoE, Abhilekh Patal, NAI.

and no longer merely remained a regional pride. From the 1990s, the Indian higher judiciary played an important role in realizing such expectations. In the process, the Government of Assam would play a more compliant role to the Union government and evolving environmental jurisprudence on wildlife matters.

Environmental Jurisprudence and the Kaziranga Environs

The rhino re-introduction program exposed the KNP to another series of intrusions by the Union government. We discussed in chapter 3 that during 1950–1970, the FD increasingly extended its control over at least half a dozen *tapus* on the Brahmaputra by removing the graziers, cultivators, and fishers. In contrast, acquiring land along the southern boundary to create animal corridors to the Karbi Hills proved challenging. Assam's political leadership was reluctant to give away the cultivable land to the sanctuary.[76] It took the FD seventeen years to create its first designated animal corridor. While the original proposal in 1950 was for 1670 acres,[77] in 1967, the corridor came to exist only in 151 acres.[78] The Union government of India's intervention in the KNP from the 1980s not only boosted but gave these long-pending proposals a more comprehensive outlook. As the struggle over land between the park and neighbouring peasants became more and more acrimonious, the conflicts reached the courts in the 1990s. This section will discuss how the WLPA and courts redefined the agrarian world in the Kaziranga environs. It shows how the WLPA was applied ironically in settling the land disputes in the Kaziranga environs.

In 1982, the IBWL sent an expert team under S. P. Shahi, a veteran Indian Forest Service officer from Bihar and an IBWL official, to investigate the large-scale killing of

[76] File no. 546, 1957, Forests (Settlement), ASA. For more discussion, see chapter 3.

[77] From the SDC, Dergaon to the SDO, Golaghat, 4 January 1951 (no. 892R), file no. RSG/92/1950, 1950, Revenue, ASA.

[78] Gazette Notification no. For/WL/512/66/17, 7 April 1967, Government of Assam.

rhinos in Assam. The team suggested stricter protection measures, removal of fishing and cultivation from the park's neighbourhood and inclusion of several adjoining areas. The Union government mounted considerable pressure on the Government of Assam to implement these measures.[79] During 1984–1988, the Government of Assam issued six notifications related to the expansion of the KNP (Table 4.1). These notifications are central to the present day land conflicts in the Kaziranga environs. These proposed additions include settled villages, tea gardens, schools, cultivated land, pastures, and fisheries. The proposed first addition (43 sq. km), mainly containing swamps and hills, was constituted into the Burapahar Range of the park and acquisition was completed by 1997.[80] Rest all the five proposed additions went into legal disputes for over two decades.

The land acquisition for the park's expansion forms the core contention of the two-and-half-decade old legal struggle. During 1994–2015, the Gauhati High Court (GHC) heard several Public Interest Litigations (PILs) and passed three judgments.[81] These judgments reflect Indian courts' increasing footprint in mediating the relationship between man and nature. The latest judgment in 2015 has been the most remarkable of all. The GHC ordered to include all the four proposed additions in the KNP by evicting the claimants. Besides, it also ordered the eviction of three more villages, Bandardubi, Deusur Chang, and Palkhowa, not listed in the proposal for inclusion. In September 2016, the government evicted these three villages using force that saw the death of two persons.[82] Subsequently, the government

[79] Tour Notes of Shri Samar Singh on his visit to Assam between 8th and 10th February 1984, file no. 7-15/79-FRY(WL) (Vol. III), 1979, DoE, Abhilekh Patal, NAI.

[80] The KNP evicted 93 families from two villages, namely Kawoimari Kissam and Palikhowa Kissam, in the Nagaon district. Yadava, "Detailed Report," 171-72.

[81] *Chandmari Tea Co. And Anr. Etc. vs. State Of Assam And Ors.* (Gauhati High Court, June 29, 1999); *Chandmari Tea Company Pvt. Ltd. And Ors. Vs. State of Assam.* (Gauhati High Court, November 22, 2002); *Sunil Das & 7 Others vs. The State of Assam and 10 others.* (Gauhati High Court, October 9, 2015).

[82] Pinku Muktiar, Prafulla Nath, and Mahesh Deka, "The Communal Politics of Eviction Drives in Assam," *Economic and Political Weekly* 53, no. 8 (February 2018).

carried out several eviction operations in the proposed sixth addition.[83] However, the acquisition of several villages in the second, third, fifth, and sixth addition areas remained incomplete as of December 2020.

Table 4.1: List of the proposed additions, nature and acquisition status, 2014.

Proposed Addition	**Year of Initial Not.**	**Year of Final Not.**	**Place/ Village**	**Purpose**	**Proposed Area (sq. km)**	**Acquired Area (sq. km)****	**Status as of 2014**
First	1984	1997	Burapahar	Corridor/ habitat	43.79	43.79	Complete
Second	1985	2010	Sildubi 1 & 2 Kaziranga NC, Hatikhuli Bagicha	-do-	6.47	4.56	Partially acquired
Third	1985	-	Panbari, Siljuri Methoni Bagicha	Corridor	0.69	0.13	Partially acquired
Fourth	1988	2012	Kanchanjuri	-do-	0.89	0.89	Complete
Fifth	1985	-	Haldhibari	-do-	1.15	0.36	Partially acquired
Sixth	1985 *De Novo* 2008	-	A stretch of the Brahmaputra river	Buffer	376	Unknown	Partially acquired

Not.=Notification. Source: Yadava, *Detailed Report*, 147-148; ** from CAG, *Performance Audit of Kaziranga National Park*, Annexure 'E'.

We will start with the latest judgment and then analyse the previous two cases. In 2012, the GHC registered a *suo motu* case based on newspaper reports on rhino killing in the

[83] Eleonora Fanari and Pranab Doley, "As Kaziranga Expands, the Fate of Grazing Communities Hangs in the Balance," *The Wire*, 26 February 2018, https://thewire.in/environment/contested-boundaries-eviction-in-the-sixth-addition-of-kaziranga-national-park.

KNP.[84] A politician also filed a PIL to remove the "human habitation and encroachment" from KNP's animal corridors.[85] Peasants from the second, third, fifth, and sixth addition areas, and the Bandardubi and Deuchur Chang villages contested that the government did not follow due procedures in land acquisition.[86] As per GHC's order, the director of the KNP submitted a comprehensive report outlining the status of the KNP's conservation.[87] The report stressed the urgency to include all the proposed additions to the KNP. It claimed that the rights and claims of the contestants were disposed of as per the law. The GHC heard all the petitions together, and apart from several interim orders, it passed its final judgment in 2015.[88]

The GHC anchored its judgments in the important developments in the Supreme Court of India (SC) since the mid-1990s. The 'public spirited citizens and organizations' submitted PILs in the SC seeking its intervention to arrest the fast declining forests and wildlife in the country. Two PILs, widely known as *Godavarman* and *WWF* at the SC, followed unprecedented judicial interventions in forests and wildlife.[89] The central question here was the demarcation of boundaries of PAs, diversion of forest land for non-forest purpose, and settlement of rights of people. The SC passed a series of interim orders on the management of forest and wildlife. The interim orders were binding upon the state governments, and high courts often cited those. We will divide the petitioners in the GHC

[84] PIL (suo motu), 66/2012, GHC.

[85] PIL no. 67/2012, GHC.

[86] WP(C) 4860/ 2013 by Sunil Das and others (proposed second, third and fifth additions); WP(C) 648/2013 by Panpur Bonansal Go-palan Samittee (sixth addition); IA 1261/2015 and 1262/2015 filed by the Bandardubi and Deuchur Chang villagers.

[87] Yadava, "Detailed Report". The report represents the collective wisdom of Indian forest bureaucrats and global conservationists. For a criticism of the park's policies, see Hem Chandra Bora's comments (pp. 398-402). Bora is a Guwahati based filmmaker with his roots in the Kaziranga environs.

[88] See *Sunil Das & 7 Others vs. The State of Assam and 10 Others.* (Gauhati High Court, October 9, 2015).

[89] The Writ Petition (C) No. 202 of 1995, *T.N Godavarman Thirumalpad Vs. Union of India and others* (Supreme Court of India); and Writ Petition (C) 337 of 1995, *Centre for Environmental Law, World Wide Fund for Nature-India vs. Union of India and others* (Supreme Court of India).

into two parts to analyse their writ petitions, arguments, and the court's decisions. The first group of petitioners belonged to the proposed second, third, and fifth addition areas identified as the animal corridors south of the KNP. Part of the land in the second and fifth addition was the remainder of what the FD could not acquire since its initial attempt in 1950. The second group of petitioners were the fishermen, graziers, and cultivators from the proposed sixth addition identified as a buffer zone in the KNP's north. We will discuss the corridors first and then the buffers.

Contested Corridors

The second, third, fourth, and fifth proposed additions are located between the park's southern boundary and the Karbi Hills. The peasants from the second, third, and fifth additions were the petitioners in the latest PIL (2013-2015) in the GHC.[90] They pleaded that the FD did not acquire their land according to the section 26A and 35 of the WLPA.[91] The section 26A, inserted in a comprehensive amendment of the Act in 1991, states:

> When a notification has been issued under section 18 and the period for preferring claims has elapsed, and all claims, if any, made in relation to any land in an area intended to be declared as a sanctuary, have been disposed of by the State Government; the State Government shall issue a notification specifying the limits of the area which shall be sanctuary from on and from such date as may be specified in the notification.

While the amendment itself does not mention the word 'final notification', it lays down the procedure for a second notification *after* determination and settlement of rights and claims.[92] In 2015, the GHC passed judgment based on the report of the Collector appointed to determine and settle the rights. In 2010, the Collector reported that in the second, third, and

[90] For all discussions on this case see *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, unless otherwise specified.

[91] WP (C) no 4860/2013 in *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 22.

[92] Khanna, *Exclude and Protect*, 7, emphasis added.

fifth addition areas, revenue authorities transferred the land in question to the park in 2004-05. The judgment held that acquisition was as per the law, and hence petitioners' claim was invalid. The Collector's report formed the basis of the 2015 judgment. However, the report followed from GHC's previous judgment in 2002 on the issue, to which we turn to now.

During 1999–2002, the GHC passed two judgments on land acquisition for the park, the second one reversing the first.[93] The 1999 judgment cleared the FD's path to acquire the land in the second, fourth, and sixth addition by evicting the petitioners. However, in 2002, responding to a review petition, a division bench set aside the judgement of 1999. In 2002, the GHC drew attention to the fact that the WLPA amended in 1991,

> …really provides a procedural safeguard before divesting any pre-existing right/claim to land. … The procedural safeguards provided under Sections 19 to 26 of the Act leaves no doubt in the mind of the Court that the Collector who is required to determine the validity of rights, claims and objections raised by the 'persons interested' is a quasi-judicial authority and, therefore, has to follow all the norms and procedures application to quasi-judicial proceeding. …the procedural safeguards and the requirements prescribed by the Act having been breached, the matter will now have to go back to the authority for de novo determination.[94]

This judgment stands out in nearly two-decades-long legal conflict that grappled the Kaziranga environs. First, the judgment course-corrected GHC's previous judgment of 1999. The 2002 judgment read from the WLPA *amended* in 1991 rather than the SC's interim orders.[95] In contrast, GHC's judgment in 1999 drew from the SC's interim order directing the state governments "to issue proclamation under Section 21 of the WPA, 1972 in respect of Sanctuaries/National Parks within two months and complete the process of determination of the rights and acquisition of land or rights as contemplated by the Act within a period of one

[93] *Chandmari Tea And Ors. Vs. State of Assam and Ors,* 1999 and *Chandmari Tea And Ors. Vs. State of Assam and Ors*, 2002.

[94] *Chandmari Tea And Ors. Vs. State of Assam and Ors*, 2002.

[95] Emphasis added.

year."[96] SC's order was based on the un-amended WLPA. Curiously, the petitioners in *WWF* case did not enclose the amended WLPA 1991 (with revised land acquisition procedures under section 26-A) with their petitions.[97] SC's reading from the un-amended WLPA made a difference in the land acquisition procedure. As per the SC's interim order cited above, the determination and settlement of rights come *after* the proclamation issued by the state government. In the case of a wildlife sanctuary, the settlement officer may allow residence or certain rights inside the sanctuary. However, in national parks, the proclamation itself becomes the final word as the WLPA envisions them as 'inviolate'. The occupants must move out by accepting the government awarded compensation. Thus, the 2002 GHC judgment reinstated the procedural safeguards in peasants' favour by referring to the amended WLPA in 1991. Secondly, the GHC's judgment in 2002 did not accept the FD's usual trope that "the petitioners, admittedly, being encroachers, have no right to claims." The judgment held that "claims under the Act that are to be enquired into must be understood to be a bonafide right of a citizen to claim an interest in the property in respect of which he has been sought to be divested."

The GHC judgment of November 2002 came at a charged political climate around conservation and agrarian rights in Assam. The Government of Assam was caught between binding orders from the SC on the one hand, and peasant protests, on the other. In February 2002, the SC in the *WWF* case asked the states to submit steps taken to clear encroachments from the RFs, national parks, and sanctuaries.[98] Following the SC's order, from June 2002, the Government of Assam evicted peasants in the Nambor RF, about 120 km from the KNP. An organised peasant movement protested against the eviction drives and demanded land

[96] SC's interim order in *WWF*, 22 August 1997, quoted in *Chandmari Tea And Ors. Vs. State of Assam and Ors*, 1999.

[97] Khanna, *Exclude and Protect*, 18-19.

[98] See Arupjyoti Saikia, "Forest land and peasant struggles in Assam, 2002-2007," *Journal of Peasant Studies*, 2008: 47, 52.

titles. We do not know if the politically charged climate about peasant rights influenced the judge. Nevertheless, it was significant that to settle the rights, the judgment departed from SC's orders and focussed on the WLPA's procedural integrity. Therefore, GHC's judgment in 2002 is a critical milestone against which ensuing events need to be analysed.

Despite the GHC's judgment, the FD neither issued the *de novo* notifications[99] nor challenged it in the SC. Instead, it continued with the acquisition process that began in 1989-90. In 2004-2005, it partially acquired the land in the second addition.[100] The FD's defiance was despite the GHC's 2002 judgment spelling out in no uncertain terms that,

> Such de novo determination, in the considered view of the Court, should not be made by the authority on the basis of the claims and objections raised almost a decade back and that in such de novo adjudication by the authority, the writ petitioners should be allowed to raise all such defences as may be available on date.[101]

The SC's hearings on *Godavarman* and *WWF* cases gave the FD a favourable milieu to overlook the GHC's judgment. In June 2003, Belinda Wright, a wildlife conservationist, appealed to the SC to expedite 'final notifications' in the proposed areas to the KNP.[102] The SC appointed Central Empowered Committee (CEC) suggested that the Government of India's Ministry of Environment and Forest (MoEF) challenge the GHC order in the SC. The Government of Assam told the SC that it would support the MoEF's challenge to the GHC's order. More importantly, it told the SC that issuance of *de novo* notification "will further delay payment of compensation and issuance of proclamations" in the second addition. It was

[99] The notifications originate in the Assam FD. The interest of the Government of Assam and FD could vary. The FD was aggressively pushing for land acquisition, whereas the Government of Assam would look at the issue expediently not to cause any political turmoil.

[100] Those who refused to give their land, category wise area is as follows: periodic *patta*: 10 acres, annual *patta*: 16 acres, government land: 485 acres, Collector's report quoted in *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015.

[101] *Chandmari Tea And Ors. Vs. State of Assam and Ors*, 2002.

[102] Government of Assam's affidavits submitted to the SC on 23 January 2006, quoted in Khanna, *Exclude and Protect*, Appendix E, 108.

safe for the Government of Assam and the FD not to issue *de novo* notification and open another front of trouble.

In December 2008, the FD finally appointed a Collector for the second addition.[103] The Collector, however, did not review the rights afresh as per the GHC's judgment in 2002. Instead, he evaluated the rights as per the land acquisition that started in 1989-90 and partially completed in 2004-05. As per this acquisition, the land was already transferred to the park. Therefore, the occupants were 'encroachers' even before the Collector began its settlement.[104] The petitions from the third and fifth additions also met with a similar fate. Though these petitioners were not part of the previous hearings in the GHC during 1994–2002, the GHC's judgment in 2002 applied to them too. The Collector's report merely endorsed the ongoing acquisition process. The WLPA amendments in 1991 tried to balance this uneven power between the government and peasants in land acquisition. The Government of Assam only followed the GHC's 2002 judgment for namesake. The later judicial deliberations unnoticed these ironies in the Collector's report that formed its basis.

Would the Government of Assam's adherence to the GHC's 2002 judgment have made any difference? The petitioners from the proposed second, third, and fifth additions in the 2015 GHC judgment were the owners of periodic title land. If the Collector started the determination of rights afresh, he could exclude such land from the proposed corridor. However, periodic *patta* land was only a minuscule proportion of the total land proposed for inclusion. The idea of creating a corridor would vitiate if such land were left out. We will return to this issue in a while in greater detail.

[103] The FD claims that this was a *de novo* notification as per the GHC's 2002 order, but in essence, it was not. Yadava, "Detailed Report", chapter 1.

[104] The government already served non-renewal notice to the annual *patta* holders. Similarly, the government acquired the periodic *patta* land and stripped the titleholders from their ownership despite their refusal.

Imaginary Buffers

We turn to the second set of contestations in the PIL in GHC during 2012–2015. The proposed sixth addition forms the entire stretch of the Brahmaputra River north of the KNP. Over the twentieth century, the Brahmaputra eroded its either banks. Erosion along the boundary of the park (Brahmaputra's south bank) reduced its core area. During 1912–1972, the park lost 85 sq. km to erosion, whereas only about 25 sq. km was added due to accretion.[105] The park authorities estimate that the park lost its one-fifth to the river during 1914–2012.[106] This loss has been most severe in the eastern and central areas of the park,

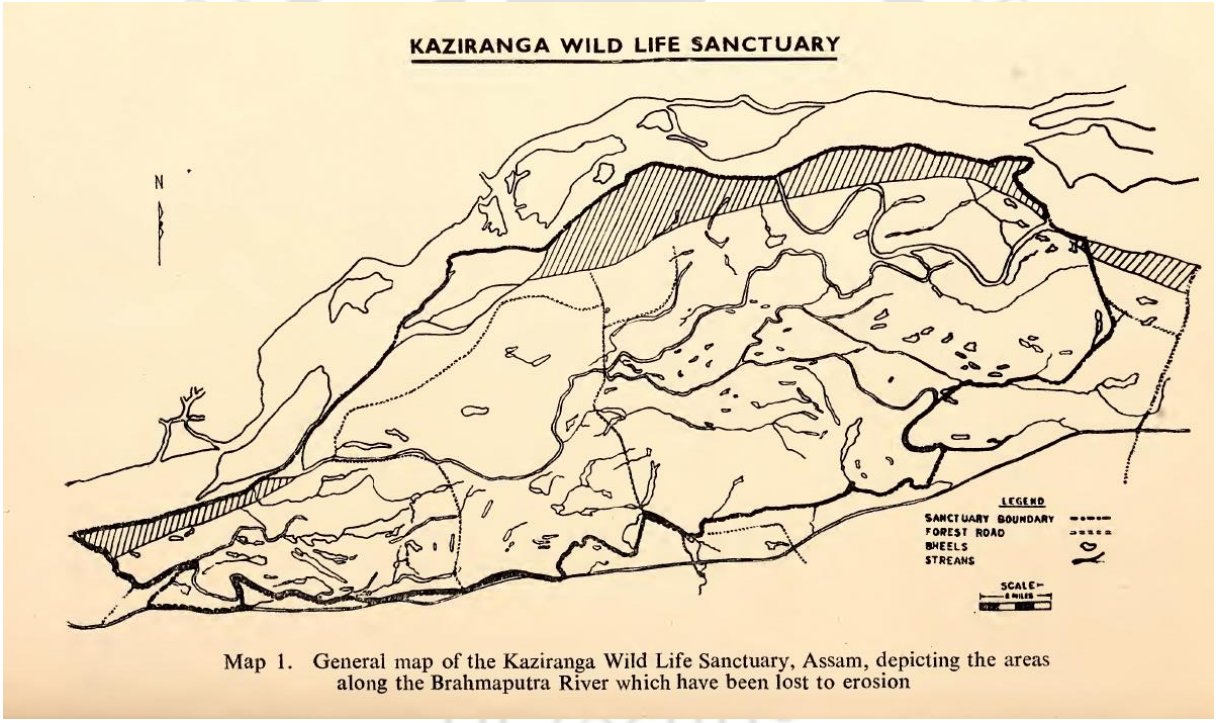

Figure 4.1: Map of Kaziranga Wildlife Sanctuary showing the eroded area, 1966.
Source: Spillett, "A Report on Wildlife Surveys in North India and Southern Nepal," 498.

[105] Sharma, and Acharjee, "A GIS Based Study," 1085-1106.

[106] All the estimates are derived from Yadava, "Detailed Report", chapter 2.

where the river eroded 2-3 km of the banks (Figure 4.1). Simultaneously, the river also eroded several densely populated and prosperous villages all along its stretch on the north bank.[107] Such erosion of its either banks over the twentieth century widened the Brahmaputra considerably. As discussed in Chapters 2 and 3, the park authorities aggressively included several *tapus* in the park. Continuous widening of the river—which is so integral to its natural history—meant that the floodplains still provided for grazing, winter cultivation, and fishing. To the IBWL-appointed expert team visiting the KNP in 1982, the vast unpatrolled river and *tapus* appeared a staggering threat:

> 50 kms of Brahmaputra forms the northern boundary and it is imperative that no fishing should be permitted over this stretch of the river. The situation is further aggravated by the fact that there are a number of *Chapories* (riverine islets accretions) permitted to be occupied by the Govt by professional graziers. Rhino poachers find easy shelter in such places –all on the southern bank of Brahmaputra facing the park.[108]

The idea of the complete inclusion of the river into the park gained ground on this backdrop. Even with the improved ability to patrol the river in the 1990s[109], the park authorities saw grazing, fishing, and cultivation as excuses to kill rhinos in the KNP. These long-held beliefs aside, in the 1990s, the park authorities also gave a scientific outlook to their claim to convert the Brahmaputra's riverbed into a buffer zone. They stressed that the habitat for the rhino was shrinking with the increasing animal population.[110] In the 1990s, even as the park expansion went into the legal battle, grazing, fishing, cultivation, and schools did not stop in the proposed sixth addition. More litigations seek GHC's intervention

[107] "Heavy Erosion in Gamiri", *Natun Asamiya*, 26 May 1955; "Erosion Threats Helem Mauza", *Dainik Asam*, 8 August 1985.

[108] Shahi, "A Note on Kaziranga", 12.

[109] Now there were two floating camps, Samrat and Hawk. Assam Forest Department, *Status Report*, 26.

[110] Parama Lahan, *Present Status and Distribution of the Indian Rhinos (Rhinoceros Unicornis) in the Wild in Assam and its Habitat* (Assam Forest Department, 1993), 1, 25, 28.

to demarcate the national park's sixth addition and human habitation.[111] The conflict in the sixth addition is remarkable because the battle was fought over land, boundaries, and pastures that are constantly on the move.

The government issued the *de novo* notification for the proposed sixth addition in December 2008 after long defying the GHC's 2002 judgment. The Collector widely announced the notification inviting claims in the proposed sixth addition.[112] He conducted public hearings at several places in the Sonitpur district in 2009. More than 1,000 graziers, cultivators, and fishers claimed their rights as individuals and organisations. While most people claimed grazing and land rights, fishers opposed the proposed sixth addition in toto.[113] First, the Collector rejected 315 claims of graziers because "grazing permits do not confer any title over these land [sic]". He found grazing to be carried out in "pre-historic", "destructive", and "uneconomical" modes. As discussed in chapter 2, the Collector's dislike resonated with colonial prejudice towards the latter. Secondly, he rejected fishermen collectives' claims because "none of them had been granted fishing lease over any area falling within the 6th addition." He also rejected other claims of fishing, grazing, and cultivation presented without documents. It included a school that was "not having any valid title over the land and was only encroaching upon the government land."[114] An incomprehensible picture emerges in settling the cultivators' land claims.

The Collector "admitted" 360 claims of land titles and "ordered the land to be excluded from the 6th addition." These claims were from villages almost entirely eroded by

[111] *Tanka Dahal and 122 others vs. State of Assam*, WP (C)/ 6909/2014, Gauhati High Court.

[112] In 1994, the Collector submitted his report in less than a month after the preliminary notification. For the Collector's report in 2010, see Memo No. HMC/HE/Forest/Enquiry/2009 dated 25 February, 2010 from H. M. Cairea, Additional Chief Secretary and Collector for the 6th Addition to the KNP, to the Commissioner and Secretary, Environment and Forest Department, GoA, (Henceforth, Collector's Report). I thank Pradyut Upadhyay, Buroighat, Biswanath for showing me a copy of the report.

[113] Collector's Report, 3.

[114] Collector's Report.

the Brahmaputra. As per the preliminary notification, these plots were south of the "northern high bank of [the] river Brahmaputra" i.e. within the proposed addition's northern boundary. He revised the northern boundary of the proposed addition as running "westward along the southern boundary of the cadastral villages situated along the right bank of the river Brahmaputra". At first look, it appears as if he pushed the northern boundary southward and excluded all claimed *patta* land. However, the ground realities present a different picture. Once eroded by the river, the terrain is crisscrossed by its channels. It is submerged for at least two months in a year. It can have no permanent boundary markers like pillars, posts, or channels.[115] Excluding the *patta* land means practically nothing for the claimants. For the KNP, the northern high bank remains the visible and *de facto* boundary.

Why did the Collector draw such a boundary that does not exist in reality? Peasants who adduced claims against their eroded land are not in its 'possession' in the strict sense of the term. The Collector knew that *patta* holders are far from reclaiming their eroded land, and villagers use the stretch as a common. The tracts serve as pastures and winter cultivation plots for nearly 100 km long north bank villages (Figure 4.2). The channels just below the northern high bank teem with fishing nets. However, the idea of a national park prize sharply demarcated boundaries within which grazing and fishing are not allowed. It meant that in practice, the park authorities would treat the north high bank, i.e. the most 'tangible' sign, as the *de facto* boundary. It is evident in the park establishing multiple camps in the un-demarcated stretch south of the northern high bank. The villagers who drive their cattle in these eroded *patta* land find the park guards subjecting them to increasing restrictions.[116]

[115] The FD has recently attempted to erect pillars showing the boundary. However, a change in the course of the river is likely to undo such efforts.

[116] My discussion with the Bebejia villagers, Gamiri, Biswanath, 21 November 2020.

Figure 4.2: Cattle returning home from the proposed sixth addition to the KNP. A fisher trying his catch at the background. Taken at Gamiri, Biswanath, November 2020.

In the proposed sixth addition, though delayed, the government carried out the land acquisition as specified in the amended WLPA and as directed by the GHC in 2002. However, excluding the *patta* land did not make any difference to the cultivators or the villagers. By drawing an imaginary boundary, the Collector paved the park's control over the 'excluded' area. The Collector not only ruled out any compensation against the excluded *patta* land, but he pre-empted other usufruct rights therein too. The GHC in 2015 held that the entire procedure by the Collector was lawful and rejected petitioners' claims.

PILs and Peasant Rights

It is crucial to discuss these PILs' wider dimensions to understand how the law has shaped agrarian rights around the KNP. The PIL was SC's innovation to address the concerns of

weaker socioeconomic group's access to justice.[117] However, scholars trace its origin as SC's strategy to re-establish its public credibility that was eroded by condoning the government excesses during the Emergency years (1975–1977).[118] The SC began by liberally interpreting the fundamental rights to maximise the weaker people's rights, and relaxing the technical barriers of accessing justice and *locus standi*.[119] Over the years, environmental issues became a legal subject to secure citizen's quality of life through a clean environment and natural heritage.[120] By the mid-1990s, the SC introduced several principles of jurisprudence like polluter pays, inter(intra)generational equity, and right to clean environment, amongst others. Most notably, the SC developed an approach of continuous mandamus drawn from the constitutional principle of mandamus.[121] The principle allows the SC to instruct the executive to fulfil a particular public duty.

The SC's interest in the PILs shifted from poverty in the early 1980s to environmentalism in the mid-1990s.[122] Anuj Bhuwania charts a typical course of PIL as, "court takes up a policy issue appoints its favourite lawyer as amicus curiae, suggests solutions based on half-baked evidence collected by its own random appointees, issues legislative guidelines binding on law and, then appoints personnel to monitor the implementation of the policy."[123] Relaxation of *locus standii* condition has led to leaving out critical participants from the PILs hearings. If the petitioners in *WWF* did not array the forest

[117] Lavanya Rajamani, "Public Interest Environmental Litigation in India: Exploring Issues of Access, Participation, Equity, Effectiveness and Sustainability," *Journal of Environmental Law*, 2007: 294.

[118] Thayyil, "Judicial fiats," 269; Anuj Bhuwania, *Courting the People: Public Interest Litigation in Post-Emergency India* (New Delhi: Cambridge University Press, 2017), 16-49.

[119] The *locus standi* is a procedural need by which the appellant must prove the linkage between the alleged illegality and harm caused to the person's interest.

[120] Sivaramakrishnan, "Environment, Law, and Democracy in India," 910.

[121] Thayyil, "Judicial fiats," 269.

[122] Rajamani, "Public Interest," 303; Thayyil, "Judicial fiats," 276; Bhuwania, *Courting the People*, 113.

[123] Bhuwania, *Courting the People*, 116.

dwellers as respondents, the SC did not bring all the parties to the litigation.[124] Instead, the SC dismissed the lone petition voicing the forest dweller's rights in the *WWF* case.[125] GHC's intervention in the KNP belongs to this trend of environmentalism in India's higher judiciary.

As opposed to the higher court's heroic persona in the Indian judiciary, the lower courts are perceived as "purely pathological – inefficient, corrupt and overly embedded in the Indian social milieu".[126] Abysmal convictions of rhino killers by the lower courts can lure one into believing this view. Between 2008-09 to 2012-13, the lower courts convicted none of the 251 persons arrested in the cases related to rhino killing.[127] However, the picture is more complex than branding the lower courts in a poor light. During 2002–2012, investigating agencies submitted the charge sheet to the court in only 8 out of 74 cases.[128] The FD and police found it immensely difficult to gather evidence and witnesses against the rhino killers. Most crime scenes were isolated and obscure, and their network spread across several states—Assam, Arunachal Pradesh, Nagaland and Manipur.[129] In the late 1990s, a forest official complained how difficult it was to prove in the court: "*that* poacher killed *that* rhino with *that* gun".[130] Corruption in investigation plays no small role.[131] 'Field Shikari', active throughout the 1980s, was arrested only once but 'managed' to escape the police charges.[132] Indian higher courts' judicial activism through PILs was the answer to such

[124] Khanna, *Exclude and Protect*, 53-54.

[125] *Kalpavriksh & Ors. Vs. Union of India & Ors*, IA No. 11 of 1998 in WP (C) 337 of 1995 in Supreme Court of India, quoted in Khanna, *Exclude and Protect*, 53.

[126] Bhuwania, *Courting the People*, 3-4.

[127] Comptroller and Auditor General of India (CAG), *Performance Audit of Kaziranga National Park - Issues and Challenges* (CAG, 2014), 42-43.

[128] CAG, *Performance Audit of Kaziranga National Park*, 42-43.

[129] Pers. Comm. with a police officer, 11 July 2019; Interview with "Field Shikari," 7 July 2019; see Deori, *Hunting the Hunters*.

[130] Quoted in, Brener, *An Anti-Poaching Strategy*, 4.

[131] It is alleged that corruption plagues the police and it was a contention between the FD and police for long. A police officer rejects any corruption in prosecuting rhino killers. See Deori, *Hunting the Hunters*, 127-130.

[132] Interview with "Field Shikari," 7 July 2019.

challenges to punish the rhino killers through conventional prosecution and protecting natural heritage. Its cascading effect is explicit in the GHC's statement in 2015: "if technical views are taken there would be substantial damage to the wildlife and national interests."[133]

Indian higher judiciary relaxed the requirements of juridical procedures in the PILs.[134] The SC in *Godavarman* and *WWF* did not hear all the parties concerned, especially the forest dwellers. It did not refer to the WLPA amended in 1991.[135] Similarly, the high-power committee appointed to assess the ground situation in KNP had no representation of the petitioners (peasants).[136] Petitioner's central argument was that the government overlooked the procedures laid out in sections 26-A and 35 of the WLPA. The legal deliberations saw it only as a 'technical' instead of substantive means to protect their rights.[137] During 2012–2015, the GHC devised various ways to protect the KNP and "verification of the Nationality of the encroachers" in the proposed additions. However, the petitions related to the determination and settlement of peasants' rights did not find similar attention. The judicial pronouncement endorsed the park authorities branding them as encroachers instead of seeing them as claimants of justice.

Why did the court accept *a priori* position on the petitioners as 'encroachers'? Legal scholars suggest that there is a general class bias in the PILs against the marginalised and poor. The court, consisting of the urban middle-class, privileges the tastes of its own ilk (environmental protection).[138] However, such explanations could be simplistic without

[133] *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 34.

[134] Rajamani, "Public Interest," 302.

[135] Khanna, *Exclude and Protect*, 23-24, 43.

[136] The advocates representing the petitioners accompanied the high-power committee in their ground visit, but they were not committee members. *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 9.

[137] *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, paras. 34, 41, 43.

[138] Rajamani, "Public Interest," 302; Thayyil, "Judicial fiats," 276; for PIL's class bias, see Bhuwania, *Courting the people*; for urban middle-class environmentalism, see Amita Baviskar, "The politics of the city," *Seminar*, no. 516 (August 2002).

turning to the historical making of peasants' rights and identity in the Kaziranga environs. In other words, what makes the peasants appear 'encroachers' and unhealthy neighbours of a heritage site like the KNP? Answer to this question shows how the legal struggles have deep agrarian roots in the Kaziranga environs.

Becoming 'Encroachers' in the Kaziranga Environs

Property rights, relative proximity to the park, and livelihood practices all feed into each other and form a social identity in the Kaziranga environs. Historically, these elements of identity formation were borne out of peasants' landlessness, forcing them to settle in the park's swampy peripheries followed by a lack-lustrous rehabilitation. As the conservation discourse strengthened, the identity of 'encroachers' sharpened in the public discourse. The wider currents of the state's anti-immigrant politics branded such identities as bad neighbours to the heritage site like the KNP. To illustrate this, we begin by discussing the property rights in the proposed addition to the KNP. While some of the following discussion is a repetition from chapter 3, the objective here is to show how the shift in the land settlement practices in the post-independence period produced easily alienable land rights for certain groups of peasants in the Kaziranga environs.

We will start from the second addition because it forms eighty per cent of the total land proposed for inclusion in the KNP (see Table 4.2 and Annexure I, for village-wise status). In the 1940s, the locality in the park's south had grazing reserves, fallow tea garden land, and unoccupied government land. In the 1950s, the FD proposed to include nearly all of it in the sanctuary. As discussed in chapter 3, it did not materialise owing to political reluctance. The FD added only 151 acres in the western tip as a critical animal corridor in 1967. In 1951, the Sildubi No. 1 village had nearly 450 acres of pastures. Twenty-one persons in four households lived here, and they mostly engaged in livestock

Table 4.2: Land acquisition status (in acres) in the proposed Second, Third and fifth addition, 2009[139]

Addition	Periodic Patta Land			Annual Patta Land			Government Land			Total		
	P	A	R	P	A	R	P	A	R	P**	A	R
Second	41	31	10	52	36	16	1,545*	1,060	485	1,638	1,126	512
Third	82	-	82	28	-	28	70	34	36	180	34	146
Fifth	12	-	12	89	-	89	91	91	-	192	91	101
	135	31	105	170	36	134	1,248	727	521	2,010	1,250	759

P=Proposed, A=Acquired, R=Remaining

* 457 acres of this was grazing land which was completely acquired by 2009.

** The total proposed land in this table (8.15 sq. km) does not match with the FD's (8.30 sq. km) for the three additions. See Table 4.1. This difference does not significantly affect discussion here.

rearing.[140] The 1961 Census found 40 households with 536 persons. Seventy-five of them were cultivators and 96 graziers.[141] In the 1960s, the government settled the erosion displaced Mariahola peasants in the foothills (present-day Durgapur and Bogorijuri).[142] Some of these Assamese-speaking families acquired cultivable land in these pastures.[143] The 1971 Census shows a drop in the number of households and population in the Sildubi No. 1 village. It found 32 households with 192 persons. There were 24 cultivators and 29 agricultural labourers but no graziers.[144] Probably, with the gradual increase in the number of cultivators, the graziers as elsewhere had to go. When the acquisition began in 1989-90, peasants had periodic *patta* for 41 acres and annual patta for 52 acres of land (Table 4.2).

Meanwhile, the Sildubi No. 2 village, west of here with more swampy character showed no population in the Censuses until 1971. As the Brahmaputra eroded the villages

[139] Estimated from CAG, *Performance Audit of Kaziranga National Park*, Annexure 'E'. See Annexure I, for village-wise breakup.

[140] They were enumerated in Census as 'non-agricultural classes'. Vaghaiwalla, *DCHB, Sibsagar*, 1951, 2.

[141] E. H. Pakyntein, *DCHB: Sibsagar, Assam, 1961* (Gauhati: Government of Assam, 1965), 28-29.

[142] See Bapkan Das and Nabin Bhuyan's biographies in Sharma and Nath, *Kazirangar Borenya*, 111-114, 86-87.

[143] Annexures to petitions in *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015.

[144] A. K. Saikia, *DCHB: Sibsagar, Assam, 1971* (Shillong: Government of Assam, 1972), pp. 256-257.

near Dhansirimukh, Mishing peasants began to settle in Sildubi No. 2 from around 1971.[145] Subsequently, the government acquired excess land from Hatikhuli Tea Estate under the ceiling law.[146] While acquisition under the ceiling law was to redistribute land to the landless peasants, the sanctuary authorities had already proposed this land for inclusion. In the post-independent period, settling in the government land or pasture and waiting for land titles through political patronage emerged as a common practice among the Mishings.[147] Mishings found community heroes like Maliram Doley (1947–2001) for their persistence in resettling the landless peasants.[148] The peasants paid *tauzi* (penalty against encroachment) to the government hoping a land title in future.[149] *Tauzi* revenue, a misnomer has such a normalcy in the Kaziranga environs (and elsewhere in Assam) that peasants perceive this as legitimate revenue receipt against their occupation. However, unlike the Bahikhowa graziers, they had a far more formidable contender, the national park.[150] When the government intended to add the land to the KNP in the 1980s, the occupants were already 'encroachers' in the government land.

Now we turn to the annual *patta* land (170 acres in three additions) proposed for addition to the KNP (Table 4.2). The colonial government put in place a system of annually

[145] Interview with a 71-year-old villager, Saro Gaon, Dhansirimukh, 27 December 2017.

[146] *Jamanbandi*, *patta* no. 1, 30 years grant, Haldhibari Bagicha village, Bokakhat circle, Golaghat district shows 25 acre land. Accessed from https://revenueassam.nic.in/dhar/index.php/Welcome/SelectLOC on 6 May 2018. However, in the 1950s, 125 acre from Hatikhuli Tea Estate was proposed to be included in the reserve.

[147] Narendra Nath Sarma, the local MLA pressed for rehabilitation of erosion affected families in the Panbari RF adjacent to the sanctuary. *ALAD*, Vol. 1, No. 31, 17 May 1971. In Bahikhowa, after the initial de-reservation of 670 acres in 1952-53, government took another ten years to de-reserve remaining 1,000 acres, although cultivators settled by the 1950s. From SDO, Golaghat to the Secretary, Revenue, Assam, 9 March 1968 (no. SGRIII/1/68/30), file no. RSG-30, 1968, Revenue, ASA. For a news report on these peasants' long wait, see "The Problem of land titles in Dhansirimukh," *Dainik Asam*, 18 may 1968; See Bishnu Lal Upadhyay's speech about long wait of settlers in Kalakhowa, Bokakhat, *ALAD*, Vol. 3, No. 23, 26 March 1979, 68-69.

[148] Sishu Ram Pegu, "Karmayogi: Maliram Doley," in *Smaranika: Maliram Doley (1947-2001)*, ed. Dharminder Doley (Bokakhat, 2001), 5-8.

[149] 158 households from the proposed second addition presented their claim of land right before the Collector (most likely in 2009-10). 116 of them presented tauzi receipts as a proof of their occupancy of government land. *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 28.

[150] For a discussion on the conflict between cultivators and graziers in the Bahikhowa PGR, see chapter 3.

recording the rights by issuing annual *pattas.* It tailored the system to the traditional practices of the peasantry, like shifting cultivation. Conversion of the annual *pattas* to periodic was primarily a government prerogative. It boosted the revenue and eased the land administration by tying a peasant to a fixed plot.[151] In the early twentieth century, the periodic *patta* land dominated the densely populated Sibsagar district. In contrast, the newly reclaimed holdings in peripheral areas like the Kaziranga environs were under the annual *patta*.[152] During 1927–1961, in Kaziranga and Bokakhat *mauza*s, the share of annual *patta* land of the total settle land increased from 25 to 30 per cent, mainly due to new reclamations.[153] The colonial government relied on the land resettlement exercises for large scale conversion of annual *patta* to periodic.[154] In a sharp departure after the independence, such 'colonial zeal' of land resettlement waned. After the independence, the Government of Assam carried out only one resettlement, i.e. in the 1960s. Suspension of resettlement left it to the peasants to convert their annual *patta* to periodic. For ordinary peasants, it was a difficult and expensive job.[155] Cultivable land grew so scarce in the Kaziranga environs in the 1950s that peasants sold their annual *patta* land, whereas only periodic *patta* land is saleable.[156] After 1970, without any resettlement, the common bureaucratic mechanism to convert annual to periodic *patta* was no match to the enormity of ecological dispossession and demand for land. For instance, a survey of the land titles in the Bahikhowa village settled in the 1950s suggests that vast

[151] In 1902-03, the average rate of revenue per acre land was Rs. 2.16 for annual patta land and 2.64 for periodic patta land, P. G. Melitus, *LRAVD 1902-03* (Shillong: ASPO, 1903), 20-21. For the colonial desire for a settled peasantry, see Hart, *Land Revenue Settlement of the Sibsagar District*, 1906.

[152] Hart, *Land Revenue Settlement of the Sibsagar District*, 1906, Appendix IV.

[153] "Assessment report of the North-western Golaghat Group of Villages in the District of Sibsagar", pp. 5-6, file no. RSR-23, 1961, Revenue, ASA.

[154] In the twentieth century, the colonial government conducted resettlement in Sibsagar district during 1902-1906 and 1923-1929 and Nowgong in 1906-1909 and 1929-1933.

[155] A resident of Kalakhowa village, Bokakhat, related to me how he got periodic *patta* for the grazing land he occupied with an extraordinary deft and social network. Interview, 12 May 2019, Kalakhowa, Bokakhat.

[156] In 1961-62, the settlement officer found several such transfers. File no. RSS-326, 1962, Revenue, ASA.

holdings are still under annual *patta*.[157] The government merely had to issue non-renewal notices to acquire annual *patta* land.[158] The cultivators became 'encroachers' in the land they were tilling for years. Owning a periodic *patta* became such a tough job that few held those when the KNP proposed expansion. In the swathe of already acquired government land, these *patta* holders' defence to hold on to their land became weak. However, some of them are still hanging in.

Neither the park nor the peasants could establish their complete possession over the proposed corridors for the last seven decades. However, there is a temporal shift in political priority regarding land use in the marginal areas. Until the 1970s, when the peasants settled in the proposed second addition areas, the state's political leadership was reluctant to give away cultivated or cultivable land to the sanctuary. This hesitancy is probably best explained by the absence of any imminent threat to wildlife habitat in the popular discourse in those decades. The WLPA and successive changes increasingly shrunk the state leadership's autonomy over the forests land. The electoral politics that once openly vouched to address landlessness over wildlife conservation found it difficult to surpass the challenges posed by aggressive environmental organisations with strong support from the higher judiciary. From the 1980s, in Assam's political priorities of land use, there is a reluctant submission to wildlife conservation.

The Forest Rights Act 2006 (FRA) came at a crucial time in the legal struggle for land around the KNP. The Act allowed conversion of the forest land to revenue villages for forest dwellers living in the locality from three generations. The landless peasants around the park, especially from the proposed addition areas, eagerly demanded land titles. However, the

[157] I have done a survey of the pattas at https://revenueassam.nic.in/ILRMS/ for the Bahikhowa village. It shows around 600 annual *pattas*, whereas the last serial number of periodic *patta* that could be accessed is 433.

[158] *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 28.

GHC in 2009 ruled out the presence of any 'forest dweller' community in Assam.[159] The ruling that not even the Scheduled Tribes (ST) qualified as forest dwellers effectively nullified the FRA in Assam. The peasants from the Kaziranga environs in the 2012 PIL pleaded for FRA implementation. The GHC declined the request.[160] It meant that the peasants' legal status as 'encroachers' remained unchanged.

Such a history of land rights for a section of peasants influences how they interact with the park. A 2000-01 socioeconomic study around the KNP shows that the landholding pattern, livelihood sources, and vulnerability to wildlife in the proposed addition villages vary from the older villages.[161] The study attests to our discussion above in the proposed second addition. Here, the dwellers arrived relatively recently and were more likely to have annual *patta* or 'encroachment' (*tauzi*) than periodic *patta* in the older villages.[162] The recent arrival meant that a household's landholding barely exceeds the homestead. They depend on income outside cultivation—wage labour, agricultural labour, or fishing. The residents in the proposed second addition (numerically Mishing-dominated) had the highest share of fishers among all the sites considered in the study. Likewise, the recently arrived households were more likely to fish than the older ones.[163] The study suggests that although fuel-wood collection from the KNP was illegal, 5.6 per cent of the respondents did. Sixty per cent of them were Scheduled Tribes/Castes, groups that are numerous in the proposed second addition.[164] The residents from the proposed addition were more likely to use thatch, timber,

[159] Vasavi Kiro, Jarjum Ete Roma, and Arupjyoti Saikia, "Implementation of Forest Rights Act in Assam: Report of Field Visit, 11-14 July 2010 and 24 July, 2010," 2010: 12.

[160] *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 33.

[161] The study covered 537 households in 37 villages. It was published in two articles. Shrivastava and Heinen, "A Microsite Analysis," 207-226; Shrivastava and Heinen, "An Analysis of Conservation," 261-274.

[162] Shrivastava and Heinen, "An Analysis of Conservation," 271.

[163] Shrivastava and Heinen, "A Microsite Analysis," 215.

[164] Shrivastava and Heinen, "A Microsite Analysis," 217.

and reed from the KNP than the rest of the villages.[165] The newly arrived households were more likely to settle at the park's edge and suffer greater wildlife losses.[166] The study also found that the people dependent on the park for resources (fish, timber, reed etc.) were more likely to be in friction with the authorities and hence held a more 'negative attitude' towards conservation.[167] Such propensity, an outcome of the agrarian history, was higher among the Mishing tribals and Muslim peasants in the proposed animal corridors.

FD officials and conservationists long urged the peasants in the park's vicinity to support conservation that would reap rich benefits through tourism.[168] From the late 1990s, the KNP has seen manifold growth in tourist footfall.[169] Private lodges and restaurants have grown manifold too.[170] One can expect that these serve to enhance the income level of neighbouring villagers. However, just as the residents interact with the park in diverse ways, socio-economic background, education etc., drive participation in the tourism industry. Safari jeeps and homestays—two visible signs of participation in Kaziranga's tourism industry—are common in most Assamese-speaking households in the old villages like Sepenakobowa, Lukhurakhania, Bosa Gaon, Kohora, Kuthori etc. However, as one enters Bahikhowa, Dhanbari and Sildubi—relatively new and predominantly Mishing tribal villages—safari jeeps become scarce. This absence is sharper in the Karbi tribal villages like Kohora Karbi,

[165] Shrivastava and Heinen, "A Microsite Analysis," 222.

[166] Shrivastava and Heinen, "An Analysis of Conservation," 269.

[167] Shrivastava and Heinen, "An Analysis of Conservation," 272.

[168] Gee, "The Management of India's Wildlife Sanctuaries and National Parks, Part III," 20; Das, "The Role, Management and Economic Function of a National Park with Specific Reference to Kaziranga," 789.

[169] Tourists to KNP increased from 19,523 in 1997-98 to 59,746 in 2007-08 and 1,28,435 in 2012-13. For the same years, the KNP's tourism revenue increased from Rs. 21,97,068 to Rs. 87,34,185 and Rs. 2,68,65,775, respectively, Yadava, "Detailed Report", chapter 4.

[170] In 2014, a report listed 100 commercial establishments like eateries, resorts, banks, lodges etc., around the KNP. CAG, *Performance Audit of Kaziranga National Park*, Appendices 'F' and 'G'.

Ingle Pathar, Mandu Bey, Sarthe Terang, and Kiling Tokbi.[171] Most safari owners buy used jeep from the military cantonments in Tezpur, spending nearly Rs. 70,000. Schooling is no bar to join the jeep safari business. However, unless one went to high school, it is unlikely to master proficiency in English and Hindi to be in good stead before the tourists. A bigger barrier to join tourism comes from fact that tourism in KNP thrives only during October–April-May, and for the remaining of the year the park is closed. Many jeep safari owners and hotel employees go back to cultivation or other petty businesses when the park is closed for the tourists.[172] Insufficient agrarian employment during the lean tourism season drives the youth from the landless and small-holding households to seek year-round employment in big cities. Since landlessness is more prominent among the Mishings and Adivasis, their participation in tourism is low. Thus a combination of factors like entry requirements (capital and education), and availability of year-round employment determine participation in the tourism industry. While the tourists flock in the KNP, a section of the youth from its periphery throngs the mainland Indian cities for employment.[173]

Do the resource history, livelihood patterns, and proximity to the park's boundary interact with the wider currents of regional politics in Assam? As discussed in chapter 3, in the post-independent period, the rhino and KNP increasingly captured the Assamese people's imagination. The massive floods of 1987-88 killed 38 rhinos. It reaffirmed the need for corridors to the Karbi Hills.[174] Illegal rhino killing in the KNP gradually declined in the

[171] These observations are based on my walks from one end to the other through these villages during December 2017 to July 2019; the business owners listed in the CAG report showed no apparent tribal names, CAG, *Performance Audit of Kaziranga National Park*, Appendices 'F' and 'G'.

[172] Some Assamese-speaking tourist guides who made a name for themselves go back to cultivation when the park is closed during monsoon, a wet-rice sowing season.

[173] The bulk of Mishing youths migrate to mainland Indian cities. Barbora, "Riding the Rhino," 7.

[174] Esmond B. Martin, and Lucy Vigne, "Kaziranga's calamity – a new threat to the Indian rhino," *Oryx*, 1989: 124-125.

1990s. Even then, nearly 20 rhinos fell to the killers annually.[175] In the twenty-first century, rhino protection has become an index of a government's performance. Rhino killing in the KNP was one of the key issues in the 2014 parliamentary elections and 2016 assembly elections.[176] This entry of rhino conservation narrative in the body politic of Assam has left a lasting imprint on how the villagers in the Kaziranga environs are portrayed and looked at in the public discourse.

Police and forest officials claimed that residents living next to the park's boundary are more likely to abet rhino killers or secretly dig pits to trap rhinos.[177] Mishing and Muslim villagers living next to the park are blamed for abetting killing the rhino.[178] Sometimes an entire village is branded as a 'poacher village'. Residents from at least three villages bordering the park agreed that their fellow villagers were involved in killing rhino, but they protested that their village was involved.[179] Suspicion against the Bengali Muslims as illegal Bangladeshi immigrants in Assam's body politic cast its shadow in the Kaziranga environs. From the early 2000s, the newspapers controlled by the urban middle-class highlighted the Muslim peasants in the KNP's western peripheries as illegal Bangladeshis among whom "the poachers find most convenient to hide".[180] The 2010s saw greater public anxieties related to the threats to the KNP from the 'illegal Bangladeshis'.[181] The house appeared divided in the

[175] Yadava, "Detailed Report," Chapter 7.

[176] "In Assam, Kaziranga's rhinos become election plank", *The Indian Express*, 6 April 2014 (E-paper); "Rhino protection a poll issue in Assam but only symbolically", *Hindustan Times*, 7 April 2016 (E-paper).

[177] Deori, *Hunting the Hunters*, narrates several cases of rhino killers, often luring the villagers bordering the park to inform the movement of rhinos and guards; see Ghanashyam Rajbongshi, *Aranyar Bhitarchora (Inside the Forests)* (Guwahati: Assam Book Trust, 2017), 14-19.

[178] Barbora, "Riding the Rhino," 16.

[179] Interview with a Bandardubi (now evicted) resident, 21 January 2018; Interview with a Sildubi No. 2 resident who pointed to a house bordering the park and told me "he built his house there precisely to kill rhino", 8 December 2017; Interview with an erstwhile Japoripathar resident, 10 July 2019.

[180] For instance, see Tehelka Bureau, "Illegal migrant settlements threaten Kaziranga," *Tehelka*, 26June 2001; for detailed analysis of the issue, see Barbora, "Riding the Rhino".

[181] Smadja, "A Chronicle of Law Implementation," 21.

Kaziranga environs among the non-Muslims about the illegal Bangladeshi immigrants' role in rhino killing. A respondent living next to the now evicted Bandardubi village dismissed such views.[182] However, some others felt with much conviction that these villages were dens of Bangladeshis killing rhinos.[183] Detecting the truth in the allegations is beyond the scope of this work. Instead, this work tries to highlight the complexities which are ignored in such branding.

Conservation in itself is understood as moral and trouble-free.[184] The KNP's stellar status shuns the local complexities of the history of ecological crisis and ensuing resource conflict. The concern over rhino killing and encroachment in the KNP is so strong that they maintain a continuous presence in the regional and national press. Many among the younger generation around the park attest to the encroachment narrative in Sildubi village (second addition). A young agro-entrepreneur who also dabbled in conservation was furious: "who asked them (Sildubi residents) to occupy the low-lying land in the corridor?" In his thirties and doing reasonably well in his business, he has no time and reasons to wonder what brought the Mishings to an almost unwelcoming landscape. For the hopping city-based journalists, the 'encroachers' menacing KNP's pristine wilderness wins a better story than the complex and bitter historical realities of ecological displacement, government apathy, and struggle for livelihood.

Interestingly, institutions with credible outlooks uncritically backed the popular narratives about the KNP. The CAG report on the KNP in 2014 expressed concerns that "there is constant inflow of fresh migrants" in the Deusur Chang and Deopani villages

[182] He said that erosion affected Muslim peasants from Rupahihat, Dhing etc. (Nagaon district) resettled in the KNP's western peripheries. Interview with a 71-year-old resident of Najan, Nagaon, 21 January 2018.

[183] See Hem Chandra Bora's comments, Yadava, "Detailed Report," 398-402.

[184] Dan Brockington, *Celebrity and the Conservation: Fame, wealth and power in Conservation* (London: Zed Books, 2008), 21-22.

(Nagaon district) near the KNP. The report added, "the mushrooming growth in population in these settlements coupled with past instances of harbouring poachers had emerged as great threat to the wild animals."[185] The CAG reports have acquired certain authenticity and ability to mirror the government failures in India.[186] However, the auditors overlooked that the KNP environs have been the refuge for the erosion affected people from elsewhere.[187] The CAG held that the new huts and buildings near the KNP were illegal arrivals. However, families could multiply too. On several instances, for instance in 2015, the legal deliberations suspected the nationality of the residents in the second, third, and fifth additions and ordered collection of their biometrics. This widely accepted position on the residents around the KNP is oblivious to the post-independent history of a scramble for resources. In a mission to protect the rhino, judicial interventions looked away from the government's failure in resettling the landless. In 2015, the GHC agreed to the Collector's report (on the proposed second addition):

> The initial claim of a group of claimants was that they are erosion- affected people and land had been allotted to them by way of rehabilitation. They could not, however, show any paper issued by any Government functionary making such an allotment of land as claimed by them. The matter was further checked from the Circle Officer, Bokakhat Circle who stated that no such allotment was ever made in the given area. Even the pattern of occupation of land does not support the claim that this land was ever allotted to the claimants by way of resettlement. Normally, resettlement is done in symmetrical plots either of 2 bighas or 5 bighas for each individual family, which are demarcated in a bigger piece of land. The land held by each family is thus equal and side by side. In the present situation the area of land occupied varies from person to person and is scattered all over the place. This clearly indicates that the claim that the land was allotted by way of resettlement is not correct.[188]

[185] CAG, *Performance Audit of Kaziranga National Park*, 54-55.

[186] In 2011-12, the anti-corruption agitation against the United Progressive Alliance (UPA) government in the centre was based on the report of the CAG audit on the allocation of coal and telecom.

[187] The Kaziranga environs standing at the intersection of four districts received people pushed out from the densely populated and flood and erosion affected areas.

[188] *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 28.

Figure 4.3: The watery Sildubi No. 2 village even in the driest part of the year. Taken in February 2018.

Comparing Sildubi with the chessboard like features of the rehabilitated village is harsh on the landless peasants who waited for land titles for decades. Sildubi No. 2 (in the proposed second addition) has an unusually watery character, unlike the older villages in the locality. The watery scape dominates as one moves towards its northwest (Figure 4.3). Landless people from Dhansirimukh settled here by clearing whatever land they could. Their long wait for land titles never materialised. Although the GHC ordered the government to evict the residents, the latter has not followed it until March 2021. Probably, evicting erosion affected Mishing tribal families will not pay well electorally in a polity where indigenous claims are rife.[189] It is in sharp contrast to Bandardubi, Deosur-chang, and Palkhowa villages, numerically dominated by the Muslim peasants.

[189] In November 2017, the government evicted families from the Amchang Wildlife Sanctuary adjoining the Guwahati city. It received intense reaction and protests for the brutal eviction of the landless Mishing families.

In 2012, a PIL pleaded the GHC to expel "human habitation and encroachment in the animal corridors in and around the KNP."[190] The director of the KNP wrote to the GHC that Bandardubi, Deusur-chang, and Palkhowa were critical animal corridors under encroachment.[191] However, the KNP never listed these villages as proposed animal corridors to be acquired. Instead, the key contention was that the villagers abetted rhino killing.[192] The director of KNP brought up a new issue before the court:

> It is learnt that huge amount of Govt. land were allotted to Social Forestry to raise plantations around the Kaziranga National Park in 1986. Most of the areas were either not planted up or abandoned subsequently. Banderdubi is one such area where the plantations failed and slowly encroachers settled thereafter. Initially there were about 5-6 families. Now a whole village has come up. This is an area which is required very much to give the much needed breathing space to the Park/ Tiger Reserve.[193]

The director, however, did not mention any notification under which the government transferred the land for social afforestation.[194] Several Bandardubi villagers have periodic *patta* dating before 1986.[195] Neither the director's report nor the court referred to the acquisition process under which such handovers or later reversals were made. However, the judgment reads that "lands are dereserved and shown as revenue village". The GHC invoked the Forest (Conservation) Act 1980 to declare that such 'de-reservation' was illegal:

> When once the Government has given the land for social forestry it is impermissible for the Government to dereserve and make it a revenue village without consent of the Central Government besides the said area is tiger reserve and animal corridor.[196]

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[190] *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 2.

[191] Yadava, "Detailed Report," Chapter 11.

[192] Deori, *Hunting the Hunters*, 93-97.

[193] Yadava, "Detailed Report," Chapter 11.

[194] These observations are based on the judgment and director KNP's report submitted to the GHC. I could not access the affidavits submitted by the KNP and the State of Assam to the GHC.

[195] For example, see periodic *patta* nos. 1-6, Bandardubi, Kaliabor Circle, Nagaon, https://revenueassam.nic.in

[196] *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, Para 37.

Most importantly, the GHC in its 2015 judgment accepted that these villagers were 'poacher villages' and ordered their eviction.[197]

> There have been persistent and repeated reports of poaching of rhinoceros, elephants and other wild animals. It is irresistible inference that the habitants in KNP area would fall in suspect group and they would be well-acquainted with the areas and animal movements, therefore they would alone be in a position to do poaching successfully or abet poaching by others. The concept of national park in the Wild Life Act contemplates that there should be no human habitation.[198]

My aim here was to highlight how social identities play an important role in environmental jurisprudence. Identities in the KNP environs are deeply rooted in Assam's agrarian history of floodplains that constantly kept the peasants in flux. When, where, and how a community came to live around the park decide how it is portrayed. The Bengali Muslims have been caught in the anti-immigrant currents of Assam's politics. The idea of the "immigrants destroying Assam's heritage", i.e. the KNP, further fuelled such politics. The GHC in 2015, by not reviewing the KNP director's claims, approved of popular public narratives about the Kaziranga environs.

Figure 4.4: Stone quarries in the Karbi Anglong Hills. Quarried provide wage labour to the poor, but choke the streams draining into the KNP. Taken in February 2018.

[197] There was no conviction in court until 2012. CAG, *Performance Audit of Kaziranga National Park*, 42-43.

[198] *Sunil Das & 7 Others vs. The State of Assam & 10 Others*, 2015, para. 39.

The residents from the proposed corridors are not the only ones who feel that they are at the receiving end of the KNP's expansion. From the early 2000s, the conservation organisations and the park authorities began to focus on landscape-level conservation. As a WWF report mentioned, such a paradigm means "working in larger regions with a string of protected areas that could be connected to ensure a large safe habitat for wildlife."[199] The WWF identified the integrity of the Kaziranga-Karbi Anglong Landscape as vital for the long term survival of large mammals like the rhino and elephant. However, such proposals overlook important political and agrarian changes in the hills.[200] During the 1980s, when the Karbi autonomous state demand movement surfaced, Karbis from the plain districts like Sonitpur and Lakhimpur settled in the thinly populated villages like Rong-Tara in the park's south.[201] The Karbi peasants also gradually shifted from shifting cultivation to plantations like tea, rubber, beetle nut, and bamboo.[202] Bamboo, a fast-growing plant and relatively less laborious than *jhum*, provides a Karbi household with a stable income. On this backdrop, the Karbis opposed the move to declare an area of 10-km radius of the KNP as an Eco-sensitive Zone (ESZ).[203] Karbis fear the ESZ will infringe upon their patterns of cultivation and collection of forest produce. In the last decade, environmental lawyers have approached the National Green Tribunal's (NGT)[204] to suspend harmful activities like stone quarrying and mining in the KNP's surroundings.[205] As Smadja observed, during 2013–2015, the Assam

[199] Species Conservation Programme, WWF-India Secretariat, *Landscape of Hope: Conservation of the Tiger, Rhino and the Asian Elephant* (New Delhi: World Wide Fund for Nature- India, 2007), see Foreword.

[200] Species Conservation Programme, WWF-India Secretariat, *Landscape of Hope*, 61-68.

[201] Interview with a villager, Rong-Tara Village, Karbi Anglong, 8 May 2018; for a detail account of Karbi politics, see Borsing Rongphar, *Karbi Anglongar Rajnoitik Itihas* [A Political History of Karbi Anglong] (Diphu: Phu Phu Publication, 2020).

[202] Interview with an ex-employee, Soil Conservation Department, C. S. Rongpi Village, Karbi Anglong, 26 April 2018.

[203] Mohen Bey and Others' (Sochen Dhenta and Duarbagori) memorandum to the Chief Executive Member, Karbi Anglong Autonomous District Council, Diphu 6 November 2017; see "Protest Against Expansion of Kaziranga", *Niyamia Barta*, 2 December 2017.

[204] The Indian parliaments established the NGT in 2010 to hasten the environmental lawsuits. Over the years the NGT has acquired substantial legitimacy.

government was caught between the protests demanding land rights and stoppage of evictions, on the one hand, and the barrage of NGT orders to clear the corridors and suspend the mining, hotels, and quarries in the ESZ, on the other.[206] The growing involvement of the NGT has left the residents anxious about their livelihood.[207]

Nothing could have raised the anxieties in the Kaziranga environs more than the move to declare KNP as a Tiger Reserve since 2005. A high density of tigers in KNP became increasingly evident by the late 1990s.[208] Throughout the 1990s, the KNP suffered severe financial hardships. The park officials saw that including KNP in the Project Tiger would significantly ease their financial hardships.[209] In early 2005, it became evident that Sariska Tiger Reserve in Rajasthan lost all its tigers following a 'tiger crisis' in India.[210] Following the decision of KNP's inclusion in the Project Tiger, the residents around the KNP intensely opposed it. They argued in a public hearing that the KNP is known worldwide for its rhino, a symbol of the Assamese pride as opposed to the carnivore tiger, a threat to humans and cattle. Smadja, who was doing field study around the KNP observed that:

> Many people in Assam make the link between tigers, Bangladeshi migrants and the central government which was said to do nothing to evict the latter. This partly explains the attitude of many farmers …, who see the tiger as a "foreigner" that the central government, supported by international environmental legislation, reintroduced into the Park, threatening rhinos and the populations.[211]

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[205] *Rohit Choudhary vs Union Of India & Ors. 38/2011* (National Green Tribunal, 7 September 2012)

[206] Smadja, "A Chronicle of Law Implementation," 16.

[207] Vas Inc, "Ban on mining in Kaziranga, victims hold protest at Kuthori," *The Hills Times*, 11 May 2019, https://www.thehillstimes.in/regional/ban-on-mining-in-kaziranga-victims-hold-protest-at-kuthori/.

[208] K. Ullas Karanth, "Kaziranga," *Sanctuary Asia*, February 2005: 31-33.

[209] B. S. Bonal, *Tiger Estimation, 2000: Kaziranga National Park* (Bokakhat: Directorate, KNP, 2000), 11.

[210] Shahabuddin, *Conservation at the Crossroads*, 2.

[211] Smadja, "A Chronicle of Law Implementation," 14.

Despite protests, in 2007, the Government of Assam constituted Kaziranga National Park and Tiger Reserve.[212] Protesting this, several Eco-development Committees[213] resigned. The Project Tiger and ESZ are two issues that have brought even the 'conservation sensitive residents' in collision with the park.[214] The Rhino Task Force report (2015) recognised that "during the last few years, there had been a wide gap between the villages surrounding Kaziranga and the management of the Park."[215] A Karbi resident of Ruthe village feared that soon the tigers would populate the Bandardubi village (evicted in 2016), and his village south of it will be the new target of park expansion. Even the perceived beneficiaries of tourism around the park expressed anxiety about their future. An Assamese-speaker of Lukhurakhania village—one of the oldest in the Kaziranga environs—said, "we have the national park in the north and the Karbi Hills in the south. Both are trying to expand. We do not know what holds in our future."[216] The changes in the hills increase their anxiety. As the park increased restrictions, the residents turned to the Karbi Hills for resources like bamboo, timber, and firewood.[217] Increasing permanency of holding in the hills means lesser avenues of resource collection for the plains villagers. The Karbis have been more assertive about the district boundary and claim control over plains villages where Assamese-speakers and plainsmen

[212] Notification no. FRW.6/2007/23, 3 August 2007, *The Assam Gazette (Extraordinary)*.

[213] These are community organizations set up to increase rural participation towards conservation by creating developmental opportunities.

[214] Bolin Deori analyses the socioeconomic roots of the barriers to conservation. He argues that the Kohora residents with high participation in the tourism are committed to the conservation. He emphasises the need to create similar opportunities in other areas to achieve desired results. Deori, *Hunting the Hunters*, 155-158.

[215] Rhino Task Force, "Report of the Rhino Task Force Submitted to the National Tiger Conservation Authority," 2015: xii.

[216] Interview with an octogenarian 85-year-old resident, Sepenakobowa, Kaziranga, 4 February 2018.

[217] In 2001, the Karbi Hills accounted for estimated 56 per cent of firewood and 76 per cent of timber in the plains villages near the park. Shrivastava and Heinen, "A Microsite Analysis," 217, 219.

live.[218] For the villagers south of the park, the hills that long served them as commons appear shut.

Conclusion

This chapter surveyed the last five decades of legislative and judicial interventions transforming the Kaziranga environs. This period is in a sharp departure from the earlier 25 years since the independence. The WLPA superseded the Assam National Park Act 1969 and provided a guiding framework in reshaping the contemporary history of the KNP environs. More importantly, the WLPA and the transfer of wildlife from state to Concurrent List and international conventions like CITES reduced the freedom of state government in managing its wildlife. In contrast, these changes considerably enhanced the Union government's ability to intervene in the KNP since the 1980s and subdued the state's electoral politics that long negotiated agrarian rights.

The greater involvement of the Union government gave a more comprehensive outlook to the KNP authorities' long-standing demands to include the adjoining areas as animal corridors and buffer zone. Nonetheless, these proposals led to a nearly two-decade-long legal struggle. Judicial interventions looked away from the question of peasants' rights over resources. Instead, some judicial pronouncements took an ideological stance to protect the KNP, although it meant sidestepping juridical processes in settling the peasants' rights and claims. Judicial variations aside, the higher courts often unnoticed the bureaucratic indifference to the law to safeguard the peasants' rights.

Such an environmental jurisprudence was not entirely shaped within the courts' four walls. The judicial understandings paid more attention to the social identities than

[218] Interviews with: an Assamese peasant in Durgapur village, 8 December 2017; a Karbi politician in Bagori, 26 December 2017; a Karbi peasant in Rongmongve, 2 February 2018.

ascertaining the consistencies in land acquisition. Identities such as ‘encroachers’ and ‘poacher villages’ are products of the locality’s agrarian history which drives the livelihood patterns and park-people interactions. These identities draw from the anti-immigrant overtones of Assam’s regional politics. In recent times, political parties have skilfully deployed such identities of dangerous neighbours of the KNP. Much of the legal deliberations, however, overlooked the historicity of the peasants’ identity as ‘encroacher’ or ‘poacher village’. In this backdrop of simultaneous ascendancy of judicial activism in conservation on the one hand, and alienable agrarian rights in the peripheral areas, on the other, the agrarian communities are gradually pushed back to make way for heritage site like the KNP.

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Chapter 5: Conclusion

Whether the colonial rule marked an 'ecological watershed' is an interesting debate among the environmental historians of South Asia. Early environmental histories argue that the colonial rule was an ecological watershed in the subcontinent.[1] Newer works more attentive to the regional variations have contested this position.[2] They point out the environmental changes in the pre-colonial period and the continuities leading up to the present time. Even considering the environmental changes like deforestation and trade on forest-based articles in pre-colonial Assam, the colonial era was a qualitative break from the past. This break was sharpest in the peasant's engagement with uncultivated land and mega-fauna. By 1900, one-seventh of the Brahmaputra Valley was under the RF and tea, where the peasants had no rights. It was a unique situation that the valley's peasants ever faced. Colonial rule boosted wildlife trade and introduced firearms in sport hunting, bringing mega-fauna like the rhino to the brink of extinction by the end of the nineteenth century. In the twentieth century, Assam's ecology, polity, and society stood on this edifice of nineteenth-century colonial transformation.

At the start of the twentieth century, nearly all land immune to the floods in the valley was taken up for cultivation, tea, and forestry. The foothills and floodplains were the only remaining areas for expanding cultivation and a host of other activities like grazing, shifting cultivation, hunting, and gathering. These foothills and floodplains were not just quantitatively shrinking edges. The colonial government constantly remade these by pressuring the peasants to produce cash crops like mustard and pushing agrarian core's troubles such as livestock herds and wildlife. Rhino preservation in the floodplains and

[1] Gadgil and Guha, *This Fissured Land*; Guha, *The Unquiet Woods*.

[2] Mahesh Rangarajan and K. Sivaramakrishnan, *India's Environmental History: Colonialism, Modernity and the Nation* (Ranikhet: Permanent Black, 2017), 1-33.

foothills came as a new entrant in the early twentieth century. A Game Reserve for the rhino had to emerge out of multiple other such contending agrarian issues. Besides, making room for the rhino raised several questions about the use of provinces' natural resources. However, it hardly shook the colonial passions of zealously expanding agriculture. It meant that during the colonial period, agricultural expansion subordinated the conservation issues.

The government envisioned the Game Reserves (later sanctuary) free from cultivation, hunting, fishing, and other human use. While the sanctuary aimed to protect the rhino, the tussle was mainly over the pasture, fish, and forest produce. Ecological changes and local conditions meant that the FD could hardly keep the sanctuary in Kaziranga free from these human usages throughout the colonial period. The colonial officials carefully excluded settled cultivation from the Game Reserves. However, the location of the sanctuary in the transient floodplains hardly materialised this vision. Shifting courses of the river erased the most carefully defined boundaries. The rapidly growing agriculture in the 1920s made it clear that wildlife outside the sanctuaries would go. However, such changes also solidified the idea of sanctuaries to protect the last few heads of charismatic wildlife like water buffalo and rhino. In the early 1930s, under the leadership of Milroy, there was intense rethinking about the future of the sanctuaries. The colonial government was reluctant to spend in a monetarily unrewarding venture like wildlife conservation. Despite deep colonial vices against grazing, the FD had to make local alliances with graziers to afford protection in the Kaziranga Sanctuary.

In the post-independent period, wildlife conservation received renewed interest among the new leaders in the state. However, the Indian conservationists feared that wildlife sanctuaries would be hostage to the state's electoral politics. They strongly advocated for removing all kinds of human usage like grazing and fishing from the wildlife sanctuaries. Thus, liberating the flagship sanctuary from its agrarian milieu became a vital goal of the

post-independent Government of Assam. However, the ecological changes and FD's inability to patrol the porous riparian border ensured that graziers continued until the late 1960s.

Ironically, agrarian expansion and ecological changes which threatened the KWS also created conditions to free it from human interferences. The 1950s saw a massive agrarian upheaval around the KWS. As floods and erosion dispossessed more and more peasants, they cleared the sanctuary's buffers and settled. In the 1950s, sanctuary officials like R. C. Das worked out social control through personal engagement with villagers to protect the sanctuary. With new villages coming up every year, the social control waned. The 1960s saw a massive assault on the KWS's rhinos primarily due to rural poverty. However, by this time, the rhino had cemented its place in the Assamese imagination. Rhino emerged as a potent symbol of Assamese identity amidst its cultural, political, and economic concerns. Rhino killings in the KWS drew a massive outcry in the public discourse, forcing the government to undertake militarised protection. The FD could disengage the sanctuary from the agrarian world in the backdrop of such upheavals in the Kaziranga environs and the simultaneous rise of the rhino in Assam's body politic.

Even as the Government of Assam tried to popularise the KWS as a prime tourism destination, several questions about the habitat and ecology went ignored. In the 1950s, the government's desire to make it a cultural icon undermined the quest for scientific research. Part of it was due to the lack of expertise to research the big mammals among Indian ecologists who mainly focussed on the birds. The soured Indo-US relationship in the 1970s further aborted such possibilities. The Government of India denied permission to the American researchers equipped with the most cutting-edge research to investigate rhino ecology. As a result, there is no significant ecological research on the KNP rhino to date despite its stellar standing. There was hardly any ecological evidence against grazing or fishing as detrimental to the wildlife. Instead, the very presence of graziers, livestock, and

fishers in the KNP was an eyesore to the conservationists. Forest officials and conservationists deployed cultural ideas and rhetoric to raise a bulwark against the graziers, fishers, and forest produce collectors without solid ecological evidence of how these harmed the wildlife. Constant advocacy and rhetoric to separate humans from the sanctuary paid off during important political shifts in India. These ideas were mainstreamed and became binding upon the state government during India's political moments when deliberative law-making processes declined. Today's national parks embody the cultural ideas that deride any human presence as defacing nature's aesthetics. It is not to argue that human interference like grazing, fishing, and thatch collection is beneficial or harmful to wildlife conservation. Instead, cultural taste rather than science was the driver of removing these human activities from PAs.

If ecological science on the KNP rhino was aborted, the questions of the habitat did not feature in the state leadership's political priorities. The post-independent governments had the massive challenge of landlessness and food supply. It was evident that the rhino population recovered by the 1950s, and there was no imminent threat or crisis to it. Therefore, the political leaders appeared reluctant to expand the sanctuary by giving away cultivated land to create animal corridors. Even when the FD pushed for animal corridors, it was impolitic for elected governments to remove the landless peasants. As the rhino population revived, questions of animal corridors and buffers became sharper. These issues impinge several contestations in the Kaziranga environs today.

The slow progress in achieving an inviolate sanctuary got the most decisive shift in the 1970s with the coming of WLPA, constitutional changes, and India's signing the CITES. These changes gave the Union government a more significant say on the conservation practices and rapidly marginalised the state's position. The Government of Assam was no longer able to decisively arbitrate on the land conflicts around the KNP. The contestations

reached the courtroom beginning 1990s. The procedural safeguards for the peasants' land right received less attention than devising ways to protect the KNP in the judicial thoughts that mediated the land conflicts. The deliberations drew from the branding of the peasants—whose land the park sought to acquire—as 'encroachers' and 'poachers' instead of reviewing the procedural probity in land acquisition. Such labelling of certain groups is rooted in the Kaziranga environs' agrarian history and Assam's anti-immigrant politics.

Despite these pervasive tussles, the KNP is a conservation success. What makes it a success story? There can be no single answer to it. The bureaucrats and conservationists offer technocratic explanations. Armed protection, laws, and resource mobilisation indeed played their role in affording protection to the rhino. However, it also begs the question, who are these efforts directed against—the villagers, graziers, fishers, and vegetable collecting women? It gets complicated here. In the 110-year history of the park, there have been phases of assault on the rhino and other animals. Some villagers, graziers, and fishers have been part of such assaults. Allegations against the park employees in such acts continue to this date. However, it is worth remembering that the rhino population revived during 1908–1960 when fifty guards—even at its peak—patrolled the sanctuary. This strength was far less in the colonial period. How does one explain this revival?

The agrarian community in the Kaziranga environs have played a subtle role in protecting the rhino. First, it is important to explain why the rhino survived in these environs though it lost everywhere else by the end of the nineteenth century. It was the failure of the guns—invariably accompanying the Europeans—to penetrate into the low-lying environs that best explains the survival of the rhino. The European officials termed the tract constituted into 'asylum' for the rhinos as 'wild' and 'unculturable'. In doing so, they shared the Europeans' fear for the low-lying swamps. Peasants, on the other hand, had a name for every *beel* in the tract—Rowmari, Foleamari, Tongikata etc.—signifying their association. So the

tracts where rhinos survived were characteristically the outlying areas for the Europeans, but of immense importance and usage to the agrarian community. Second, the comeback of the rhino population as evident by the late 1930s was through accommodation of the peasants' resource concerns instead of any significant patrolling. The peasants—irritated by the wildlife depredation and criminalization—confronted the government on the latters' lopsided emphasis on cultivation. FD accommodated grazing and fishing as a reconciliatory measure. Until the early 1950s, it looked the other way on the reports of hunting so long as the rhino was left unharmed. Rhino's ecology—rarely ventures out of its prime habitat—hardly likened it to the crop-raiding wild boar or elephant in the peasants' world. Therefore, social consensus in the form of large number of men joining hands to trap the innocuous rhino in pits was not easy to come by and rhino killing remained at the worst only a low-scale affair.

However, as this thesis pointed out, extraordinary distress and political unrest could change to bring in heavier spells of assault on the rhino. The Great Depression of 1929 and rural upheavals in the Kaziranga environs in the 1960s were extraordinary circumstances. In ordinary times, to protect the rhino, sanctuary officials made concessions to the graziers and looked the other way on fishing or deer hunting. However, only utilitarian calculations could not have protected the rhino. Several rhinos, especially older males, grazed outside the sanctuary next to the domestic livestock. E. P. Gee observed 'Burha Gunda' for fourteen years (1939-1953). In Gee's words, "Burha Gunda" was "on near-friendly terms with hundreds of people, but he never escaped the threats of his own kind." When 'Burha Gunda' died, 'Kan Kata' replaced him for several years. These were not rare examples. Several rhinos occupied the Brahmaputra *tapus* beside the graziers before the pressure to sanitise them built up. Thus, a fuller assessment of the KNP's success story lies in the fluctuations in the agrarian and political world.

The KNP has long overcome the threats of rhino extinction. Now there are several more rhino habitats with steadily growing numbers. Even a 40-sq. km sanctuary like Pobitora boasts of more than 100 rhinos. Pobitora was a grazing reserve until the late 1960s, surrounded by a dense human population. It can be a fascinating example to investigate how the ecology, politics, and society interacted to make it a home for the rhino. The approach discussed in this work offers some clues for a fresh investigation.

The KNP's success is also a cause of anxiety for the residents. People in even some of the oldest villages live in the anxiety of being swamped by the park. A school teacher from one such village argued, "there are rhinos in Kaziranga because of our (villagers) presence and not without."[3] There are new challenges to the KNP. The stone quarries in the Karbi Hills choke the water streams, which are critical to enliven the KNP. The mushrooming infrastructure around the KNP in the last few decades narrowed the animal passages. There is an increasing demand from the residents to widen the National Highway on the KNP's south. Forest officials and conservationists fear that it would interfere with animal movement. The government has proposed a 35-km elevated highway on the stretch south of the park.[4] Only time will tell the success of such solutions.

The thesis began by outlining the need to situate the KNP in its agrarian and ecological context. The approach paid off in showing the various stages of its transition in achieving a human interference-free KNP. These transitions were deeply rooted in the complexities of volatile floodplain geography. The floodplains produced enduring challenges to the conservation practices, mainly assumed for sharply demarcated and patrolled boundaries. More importantly, their peripheral location in the agrarian order kept the

[3] Villagers around the GHNP make similar argument. Chhatre and Saberwal, *Democratizing Nature*, 5.

[4] Anonymus, "Assam CM Himanta proposes elevated corridor at Kaziranga," *Nagaland Post*, 11 August 2021, https://www.nagalandpost.com/assam-cm-himanta-proposes-elevated-corridor-at-kaziranga/238097.html

Kaziranga environs in a constant flux of people searching for land and pastures. The conservation issues related to the buffers, corridors, and habitat are deeply embedded in these churns in the agrarian world. The ecological changes and agrarian churns shape the social identities around the KNP and their responses to conservation. These identities are central to understanding the contemporary legal and judicial interventions around the park.

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Appendix

Appendix I: Land acquisition in the second, third and fifth proposed additions to the KNP (Based on the Circle Officer, Bokakhat's Survey, 2009)

Name of the Scheme	Land Acquired Village Wise	Class wise Land	Quantum of land Acquired	Quantum of land handed over to KNP	Quantum of land to be handed over to KNP	Remarks
2nd Addition to KNP Vide L. A. Case no. 4/89-90	No. 1 Sildubi*@	A. P. Land	158B-3K-18Ls	109B-0K-0Ls	49B-3K-18Ls	Pattadars of 18B-1K-1Ls could not be found in their given address 31B-2K-0-Ls of the land could not be handed over to the KNP as pattadars had refused to hand over the land.
	No. 1 Sildubi*@	P. P. Land	31B-3K-16Ls	Nil	31B-3K-16Ls	31B-3K-16Ls could not be handed over to the KNP as pattadars had refused. The pattadars are occupying the land by way of cultivation of seasonal crop.
	No. 1 Sildubi@	Govt. Land	126B-2K-8Ls	113B-4K-0Ls	12B-3K-0Ls	12B-3K-0Ls are under encroachment by way of cultivation of seasonal crop.
	No. 1 Sildubi@	P.G.R. Land P.G.R. Land V.G.R. Land Total Land	630B-0K-12Ls 606B-2K-12Ls 146B-2K-6Ls 1383B-0K-10Ls	630B-0K-12Ls 606B-2K-12Ls 146B-2K-6Ls 1383B-0K-10Ls	Nil Nil Nil Nil	As per the order of the Principal Secretary to the Government of Assam, Higher Education Deptt. & Collector to the 2nd Addition to the KNP vide his Memo. No. HMC/HE/Enquiry/Forest/08/Pt-III dtd. 29-07-2009 the Dag nos. are 238 (VGR) 386 (PGR) and 410 (PGR) of no. 1 Sildubi gaon of Kaziranga Mouza is corrected in the Chitha.
	No. 2 Sildubi*@	Govt. Land	1395B-2K-17Ls	Nil	1395B-2K-17Ls	The entire 1395B-2K-17Ls is under encroachment by way of cultivation of seasonal crops by indigenous people belonging to Miching and TGL/ex-TGL community
2nd Addition to KNP Vide LA Case no. 5/89-90	Kaziranga NC (Nanke)@	Govt. Land	1388B-3K-18Ls	1330B-0K-0Ls	58B-3K-18Ls	The land is under encroachment by way of cultivation of seasonal crops by indigenous people belonging to Miching community
	Hatikhuli Bagicha Gaon@	P.P. Land	92B-2K-09Ls	92B-2K-09Ls	Nil	Possession handed over to the KNP and also corrected the record in remarks column of Chitha on 26-07-2004.
	Hatikhuli Bagicha Gaon@	Ord Govt. Land	378B-3K-13Ls	378B-3K-13Ls	Nil	Possession handed over to the KNP dtd. 5-7-2004 and also corrected the record in remarks column of Chitha.

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Name of the Scheme	Land Acquired Village Wise	Class wise Land	Quantum of land acquired	Quantum of land handed over to KNP	Quantum of land to be handed over to KNP	Remarks
3rd Addition to the KNP Vide L. A. Case No. 1/91-92	Siljuri Gaon*	P.P. Land A.P. Land Total Land	74B-0K-12Ls 247B-4K-17Ls 322B-0K-09Ls	Nil Nil Nil	74B-0K-12Ls 247B-4K-17Ls 322B-0K-09Ls	Notices were issued to the pattadars. But all the pattadars unitedly taken the decision of not to receive the notice. Again in the month of November 06 notices were served by hanging on the spot. Lastly Circle Officer, Bokakhat was directed to take step to hand over possession of the land in the KNP authority vide SDO's office letter no. BRQ 13/97-2007/40 Dated 19-07-2007 due to their refusal to accept amount of compensation and notices thereof. The Pattadars are occupying the land land by way of cultivation of seasonal crop and not by constructing dwelling houses.
3rd Addition to the KNP L.A. Case No. 2/91-92	Methoni Bagicha	A. P. Land	11B-1K-11Ls	Nil	11B-1K-11Ls	-do-
	Methoni Bagicha	Govt. Land	131B-1K-16Ls	30B-1K-13Ls	101B-0K-3Ls	There is encroachers belonging to T.G.L/Ex-T.G.L. people as reported by the L.R. staff concerned by cultivation seasonal crops. There are also some discrepencies observed in office records regarding status of the land. Matter is being enquired into [illegible] actual status.
	Siljuri Gaon	Govt. Land	79B-0K-02Ls	71B-2K-02Ls	7B-3K-0Ls	-do-
5th Addition to the KNP L.A. Case No. [illegible]/88-89	Haldhibari Gaon*	A. P. Land P. P. Land	268B-3K-15Ls 37B-0K-2Ls	Nil Nil	268B-3K-15Ls 37B-0K-2Ls	Record not clear as to whether notice issued to pattadars or not. However, fresh notice is being issued in concerned pattadars to collect compensation of land and to take possession of the concerned land.
	Haldhibari Gaon	Govt. Land	273B-4K-01L	273B-4K-01L	Nil	The possession of land has already been handed over to the requiring deptt.

B=Bigha, K= Katha, L=Lecha, 1L =144sq. ft., 1K=2880 sq. ft, 1B=14,400 sq. ft. or 0.33 acre.

Source: CAG, *Performance Audit of Kaziranga National Park*, Annexure 'E'. The Table is reproduced with minor adjustments on the rows. Following identification added.

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