THE POLITICAL ECOLOGY OF NON-COMPLIANCE: ENCROACHMENT, ILLICIT RESOURCE EXTRACTION, AND ENVIRONMENTAL GOVERNANCE IN THE MANAS TIGER RESERVE (INDIA)

A Dissertation

by

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ABSTRACT

This research investigates the interaction between environmental conservation and management in a protected area and the livelihoods of rural producers set against the political backdrop of an ethnically diverse and conflicted socio-cultural landscape. The establishment of protected areas for biodiversity conservation frequently separates people from their physical environment through an overall curtailment of traditional natural resource use. *Indigenous* or *tribal* people are regularly viewed forest stewards and victims of conservation enclosures, while being simultaneously labeled as forest destroyers and encroachers on biodiversity conservation landscapes. While existing literature has documented the impacts of protected areas on tribal people, as well as the formation of environmental identities and subjectivities among forest-dwelling communities, scant attention has been paid to how their interactions mediate environmental governance. This dissertation addresses this gap with data from sixteen months of fieldwork in the Manas Tiger Reserve (or Manas; Assam, India) utilizing both qualitative and quantitative methods to evaluate the role of identity, livelihoods, and governance within a political ecology framework. A *tribal* identity within the Bodo ethnic group developed through interactions of within-group and externally-generated understandings of what it means to be 'Bodo', with the dialectic mediated by socio-cultural, political, economic, and ecological factors. Land use practices and livelihood generation strategies in the Manas landscape include illegal occupation of land within Manas for agricultural production, as well as illicit natural resource extraction (timber,

fuelwood). The Bodo community has a dominant role in the governance of Manas, positioning itself as the protector of Manas while actively driving land cover change within the Reserve. These findings generate the following conclusions: the manifestation of a self-realized, ethno-regional Bodo identity occurs through socio-cultural conceptualizations, making a living in the Manas landscape, and an environmental subjectivity that positions Bodos as forest-dwelling people. Bodos socio-politically dominate non-tribal groups, illicitly extract Manas resources, while being key players in managing the Reserve. The result is an inconsistent domain that produces varying environmental subjects who both participate in and reject the technologies of the State through a lens of "technologies of the self", thus straddling the gap between environmental legislation and its implementation in the MTR.

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Contributors

This work was supervised by a dissertation committee consisting of Professors Gerard Kyle (advisor) and Amanda Stronza of the Department of Recreation, Park and Tourism Sciences (RPTS), Thomas Lacher of the Department of Wildlife and Fisheries Sciences at Texas A&M University (TAMU), and Professor Paul Robbins of the Nelson Institute for Environmental Studies at the University of Wisconsin-Madison, and Professor Forrest Fleischman of the Department of Forest Resources at the University of Minnesota.

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NOMENCLATURE

AAPTL	All Assam Plains Tribal League
AASU	All Assam Students Union
AATL	All Assam Tribal League
ABSU	All Bodo Students Union
AGP	Asom Gana Parishad
ALRRA	Assam Land and Revenue Regulation (Amendment) Act
BoBs	Belts or blocks
BR	Biosphere Reserve
BAC	Bodoland Autonomous Council
BLTF	Bodo Liberation Tigers Force
BPF	Bodo People's Front
BdSF	Bodo Security Force
BTAD or Bodoland	Bodo Territorial Area Districts
BTC	Bodo Territorial Council
BVF	Bodo Volunteer Force
CBNRM	Community-Based Forms of Natural Resource Management
Duars	Eastern Duars
FPG	Forest Protection Group
FRA	Forest Rights Act
GOI	Government of India
INR	Indian Rupees

IFD	Indian Forest Department
ImFD	Imperial Forest Department
MTR	Manas Tiger Reserve
MoEF	Ministry of Environment and Forest
NDFB	National Democratic Front of Bodoland
NFP	National Forest Policy
MoTA	Ministry of Tribal Affairs
NP	National Park
OTFD	Other traditional forest dweller
PTCA	Plain Tribals Council of Assam v
PA	Protected Area
RF	Reserved Forest
ST	Scheduled Tribe
TBB	Tribal Belt and Block
USF	Unclassed State Forest
WHS	World Heritage Site

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CHAPTER I

INTRODUCTION

1.1 STATEMENT OF THE PROBLEM

India's northeastern region is included within the world's biodiversity hotspots and boasts of a disproportionate share of the nation's remaining forest cover (Myers et al. 2000). This region's post-colonial and post-independence history is a troubled one, mired in innumerable and enduring armed conflicts usually along ethnic and religious fault-lines for independence and control of key resources (Sharma 2011). Hence India's northeast is routinely in a state of unease in which brewing unrests can frequently burst into violent turmoil. The map of this region has witnessed many changes as state lines have been redrawn to politically empower different communities, contain rebellions, and appease disgruntled ethnic groups (Baruah 2005). The modern-day state of Assam contains much of the forested landscape in this region and has witnessed shifting borders numerous times. In recent decades, the state has seen a significant decline in forest area as well as fragmentation of contiguous forest, as various communities struggle for self-governance and political representation (Sharma, Madhusudan, and Sinha 2012).

The Manas Tiger Reserve (MTR or Manas) covers 2837 sq. km. of tropical moist forests directly south of the foothills of the Bhutan Himalayas. It is part of an area known as the Eastern Duars (henceforth Duars) that forms the northwest portion of Assam. The Duars have historically been home to a multiplicity of ethnic groups as well as a rich non-human biodiversity. The Duars formed the political and economic gateway

between the northeast and the rest of the Indian subcontinent (Misra 2005). Their pre-colonial history is steeped in extensive use of the Manas forests to satisfy a variety of socio-cultural, political, and economic needs. Such utilization continued in the colonial period with the British using Manas as a major source of timber to fulfill key administrative goals (Lloyd 1894). Additionally, the British transformed the complex, layered, political economy of the Duars into an unambiguous system designed to feed centralized economic coffers (Misra 2011). In line with this overarching political and economic philosophy, the British replaced diverse, shifting, largely subsistence systems of agriculture with sedentary agrarian production.

The state of Assam is home to a number of communities including the Bodos, who have led an armed struggle for an independent state since the late 1980s. In response to the demand for a separate Bodo state, a memorandum of understanding was signed by the Government of India in 2003. This memorandum granted Bodo leadership administrative control over an area on the north bank of the Brahmaputra known as the Bodo Territorial Area Districts (BTAD) in exchange for surrender of the main organizations leading the insurgency (South Asia Terrorism Portal 2003). The BTAD, a semi-autonomous political zone within Assam, is governed by a quasi-governmental Bodo Territorial Council (BTC). The focus of this study, the MTR, is located within the BTAD and falls within the jurisdiction of the BTC.

As the largest forested portion of the BTAD, the ecological status of Manas has important livelihood outcomes for rural and forest-dwelling communities which depend heavily on the forest for fuel wood, construction material, potential agricultural land,

cattle fodder, food, medicinal plants, and a range of economically valuable non-timber forest products. The Manas Reserve Forest in the western section of the MTR is thus an ideal location to probe the questions posed in this study. Not only due to its importance for the multiplicity of rural livelihoods and ecologies, and its significance for biodiversity conservation (e.g. Birdlife International 2017), but also because of the unique juxtaposition of three layers of government as well as the socio-political conflicts. And yet, no studies have examined how environmental governance is influenced by this distinctive tripartite system. Nor how different ethnic groups are attempting to leverage power through specific policy and associated legislation to achieve particular socio-political and livelihood outcomes. All of these factors in turn have implications for species of conservation concern through ecological transformations.

1.2 IDENTIFYING A GAP IN THE LITERATURE

Tropical forest conservation is often along the agricultural-forest interface; the people along the frontlines are frequently peasants who are economically and politically marginalized (West, Igoe, and Brockington 2006). This is true for the MTR as well. Outright prohibition or severe curtailment of traditional access to critical forest resources essential for maintaining livelihoods are frequent outcomes of protected area establishment for the conservation of biodiversity in India (Saberwal and Rangarajan 2003). The application of associated forest conservation laws results in the outlawing of most livelihood activities, thus creating incentive for acts of noncompliance by local

communities (Robbins et al. 2006). Such acts are typically labeled with terms with negative connotations, such as *encroachment* and *poaching*.

A recent national legislation, the *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act* (2006), known as the Forest Rights Act (henceforth FRA) in popular parlance, aims to correct such historic injustices by providing for use-rights (Bawa, Rai, and Sodhi 2011). It disproportionately favors communities that are formally designated as 'Scheduled Tribes' (or 'Indigenous People'), and informally referred to as *tribals*, thus providing direct incentive for groups not designated as such to attempt to obtain this classification. Critics claim that enactment of the FRA could generate conflict both among and between forest dwelling groups, bureaucratic authorities, and other stakeholders. Furthermore, they question the effectiveness of the FRA in both providing for local livelihoods and biodiversity conservation (Dash 2010), given the "multi-jurisdictional" nature of laws pertaining to forest conservation and management (Kumar and Kerr 2012, 760). Yet, the reasons for these stated outcomes and processes affecting resource-user livelihoods remain unclear.

To fill this gap, this research determined how forest resource-user livelihoods are negotiated and produced through discursive and material practices in and on the fringes of Manas (Bebbington and Perreault 1999; Sundberg 2006). It relied on a political ecology approach (Robbins 2012) and adapted frameworks of governance "assemblage" (Li 2007) and livelihood "assets" (McSweeney 2004).

1.3 LITERATURE REVIEW AND CONCEPTUAL FRAMINGS

1.3.1 Indigeneity, the Tribal Slot, and the Environment

The concept of indigeneity foundationally rests on notions of "historic continuity, distinctiveness, marginalization, self-identity, and self-governance" (Dove 2006, 192). The origins of the concept of indigeneity can be traced to colonial era discourses that were essentially a thinly-veiled euphemism for portraying people as *primitive* (Béteille 1998). Notions of primitiveness in turn were simultaneously associated with negative ideas of backwardness, ignorance, destructiveness, as well as romanticized constructions of *primitive* people as having deeply spiritual and enduringly sustainable relationships with their external environment. This duality resulted in fundamentally contradictory descriptions such as *noble savage* (Hames 2007). Such stereotypical discourses are hegemonic in their normalizing, essentializing imperative which seeks to construct target populations in particular socio-cultural ways and attempt to tie them to land in specific relationships, thus generating distinct "environmental subjects and identities" (Robbins 2012, 215).

The contingent nature of this notion has resulted in a fundamental critique of its stability and exclusivity. Identities, while being situated in preceding periods, are "subject to the continuous 'play' of history, culture and power" and are thus far from being fixed, unique entities (Hall 1990, 225). Symbolic and material elements of indigenous identities are not exclusive to communities labeled as such. Indigenous communities have long histories of cultural and corporeal interactions and associations with non-indigenous groups. Powerful institutions such as governments have historically

attempted to encapsulate complex symbolic and material spaces of people they deem *indigenous* through normalizing stereotypes and simplifications. Furthermore, both colonial administrations and indigenous people themselves have either radically silenced or selectively promoted elements of native ontologies to further particular political goals.

Indigenous people, however, do not simply roll over and play along with an identity that is externally thrust upon them. As a contingent idea, indigeneity draws on "repertoires of meaning" as well as "particular patterns of engagement and struggle" (Li 2000, 151). It is a point of conjunction that such groups have utilized, particularly since the latter half of the twentieth century, to articulate with various socio-cultural, economic, and political processes. Thus exhibiting agency in the "selection and combination of elements that form a recognizable indigenous identity" (ibid. , 157). In doing, so they are not just adapting elements of the concept to their own benefit and advantage, but are reworking hegemonic tools as forms of resistance and global political action (e.g. the 2007 'United Nations Declaration on the Rights of Indigenous Peoples'). Such empowerment has simultaneously, and ironically, marginalized groups that are perceived as lacking one or more of the characteristics that are key to being viewed as *indigenous*. It can be a "double-edged sword" however, generating expectations that target communities will restrict their behaviors and practices to conform with what it means to be *indigenous* (Dove 2006).

A key component of the *indigenous* identity is fixing such communities in space, specifically in many instances to forested landscapes through narratives that cast them as *people of the forest* / *forest dwellers* (Béteille 1998). Such geographical positioning is

associated with discourses of exceptional socio-cultural and spiritual links with the physical environment, possession of profound, localized ecological knowledge, and land use practices that are enduringly sustainable. Notions of environmental sustainability originate from ideas of equilibrium in ecology and balance in nature. Equilibrial ecology has come to be challenged by recent research that portrays nature as a system replete with stochasticity and randomness (Botkin 1990; Cooper 2001; Ellis 2015). Ironically, the fixing of dynamic, unpredictable natural processes in traditional ecological thought mirrors the constriction of the multifaceted environmental practices of *indigenous* people in ontologies of indigeneity.

In recent years, *indigenous* peoples of the world's tropical forest ecosystems have been vested with traditional knowledge systems steeped in ethics of sustainability and environmental wisdom (Berkes 2012). This is a particularly noteworthy shift, since it was precisely such groups that were broadly labeled and perceived by colonial administrations (in the 19th and 20th centuries) as environmentally ignorant and destructive through both their inappropriate utilization of natural resources as well as their uncontrolled population growth (Colchester 2004). Meanwhile, a growing body of empirical and theoretical evidence has demonstrated the effectiveness and relative sustainability of systems of management of both land and its associated resources by a range of *indigenous* communities (Gibson, Williams, and Ostrom 2005). Such systems have evolved over time to flexibly weather ecological contingencies, and through active management of the landscape, created a variety of ecological niches for a diversity of species (Igoe 2004).

Though *indigenous* systems of natural resource management are still in vogue, a growing body of literature has begun the process of critically analyzing the concept. The combined intellectual focus of such works has questioned its ideological stability and instead positioned it as an especially unstable unit of social analysis. Rather than being models of coherence, homogeneity, and egalitarianism, communities are rife with hybridity, incongruity, and inequalities (Brosius, Tsing, and Zerner 1998). Though *indigenous* communities often have place-based environmental knowledge and have developed relatively equitable and sustainable systems of resource-sharing, such outcomes are not predictable or inevitable (Agrawal and Gibson 1999). Power asymmetries, information disparities, complexities of scale, and clashes of divergent opinions result in elite-capture, as well as difficulties in organization, agreement, and enforcement (Agrawal 1995). In addition, ecological systems are "complex adaptive" systems with issues of scale, uncertainty, and multiple stability domains (Berkes 2004).

Hence, the complexity of coupled socio-ecological systems highlights a plurality of perspectives pertaining to scale, knowledge, and power, and cautions against dichotomously conceptualizing *indigenous* peoples as either *destroyers* or *saviors/stewards* of the environment. Indigenous communities have and continue to challenge the restrictive essentialisms of external constructions through a diversity of behaviors. Whether by engaging in economic strategies that are considered environmentally unsustainable (Ishiyama 2003) or actively adopting colonial-era essentialisms to leverage power in the course of furthering political imperatives

(Sundberg 2006), indigenous people have proven as unpredictable and dynamic as the ecosystems they inhabit.

1.3.2 Land Use and Land Cover Change in Protected Areas

Protected areas (PAs) are the cornerstone of most biodiversity conservation efforts, covering approximately 12% of the world's land surface, with an underlying paradigm of maximizing biodiversity through either outright exclusion or regulation of human use (e.g. Terborgh 1999). Such systems of management have been frequently linked to a colonial model of governance that legitimizes 'scientific' discourse stemming from technocratic bureaucracies that privilege 'national interest' over the rights of local claimants to critical natural resources. Furthermore, and counter intuitively so, such centralized systems have been linked to widespread and intensive environmental degradation across a diversity of ecosystems (Smith et al. 2003). This has contributed to negative cultural, ecological, and political outcomes for native communities, resulting in tensions that have manifested themselves in outright opposition, as well as acts of subversion and noncompliance (e.g. encroachment, poaching). Despite widespread conflict between administrative bodies and local populations, the total acreage under PAs continues to increase and intense debate rages on about their efficacy (Brandon and Wells 1992).

The relationship between people and terrestrial PAs in India has had a long, byzantine history characterized by displacement, as well as curtailment and criminalization of customary access to natural resources. These factors have resulted in

frequent rule-breaking and noncompliance (Gadgil and Guha 1995; Robbins 2004). The outcome of such dynamics has been contentious at best with local communities reacting negatively to forced evictions, restrictions or outright bans on the collection of forest produce and/or hunting, reductions in land area available for agricultural production, as well as the marginalization of the way they comprehend and relate to whatever might be conceived as 'nature' (West and Brockington 2006). The early 1990s saw a shift in the Indian environmental conservation policy towards a more inclusive approach with increased emphasis on community-based forms of natural resource management (CBNRM) (Agrawal and Ostrom 2001). Though the early 21st century has seen an increase in joint forest management and community-based forestry initiatives in south Asia (Nagendra et al. 2004), an ongoing debate ensues about the wisdom of CBNRM in general (Brosius, Tsing, and Zerner 1998; Agrawal and Gibson 1999), and specifically with regard to allowing such forms of co-management within PAs (Wilshusen et al. 2002). This change is echoed in increasingly protectionist paradigms (e.g. Terborgh 1999) that shifted the terrain of the debate in the opposite extreme, thus denying relatively sustainable land use practices, and ironically creating another mythology – that all communities act to maximize short-term gain (Oates 1999).

A frequently proffered solution to the problem of encroachment in the south Asian context is to relocate them to an area outside of the PA (McLean and Straede 2003). This process is frequently carried out without sufficient effort to determine socio-economic costs through loss of access to traditionally harvested resources (Rangarajan 1996) and without regard to other socio-cultural consequences of such eviction (McLean

2000). Even in areas where local people are not evicted, there are impacts on overall welfare of resident communities through curtailment of resource access and opportunity costs (Adams et al. 2004). What is often not highlighted in relevant discourse is that forest communities are often the first and an effective line of defense against illegal resource extraction from local forest land (Schwartzman, Moreira, and Nepstad 2000). For example, higher rates of forest fragmentation have been documented on the periphery of the Tadoba Andhari Tiger Reserve (India) as compared to fringe areas of this PA. In a microcosmic form of the relationship between resource-consumption nexus between the urban and the rural (DeFries et al. 2010), Nagendra et al. (2006) have documented higher consumption of forest resources by more densely populated areas outside this PA. Through better connections with markets via improved transport infrastructure, such populations also reap a disproportionate share of the profit. Commodity chains dependent on forest resources are also extracted by more socially and economically marginalized communities living within the PA boundary whose dependence on the forest is more likely to be near subsistence levels.

This research focused on the political ecology of such poverty-conservation conflicts by factoring in levels of marginalization based on socio-cultural and political power differentials. In doing so, I not only explored the underlying drivers of land use and land cover change in encroached landscapes, but also researched the interactive nature of local political economies and environmental policy.

1.3.3 Political Ecology of Noncompliance: Rural Livelihoods, Institutions, and Environmental Policies

Examining the relationship between rural agro-producers, PAs, and the *State* that explore environmental phenomena at the intersection of livelihoods, biophysical processes, and broader political-economic systems also contributes to studies in political ecology (Forsyth 2003). Formal institutions of the state have exerted considerable sway in this regard through the production and deployment of powerful and purposeful policy narratives (Guha 1989). At the same time, local administrative and socio-economic elites have frequently utilized specific policies and legislations to resist attempts by the *State* to maintain control over forest resources (Saikia 2011). Despite their pervasive influence, the roll-out of environmental policy in 20th and 21st century India calls for caution with regard to assuming that such efforts are carefully and deliberately planned (Sivaramakrishnan 1999). In more recent literature, the interaction of a multiplicity of institutions (local, national, and global) and narratives/discourses and varying perceptions of authority, power, and rules interacted with ecological and social contexts to produce a multitude of extractive practices and management outcomes (Robbins 2012).

Recent studies in political ecology demonstrate a more complex and intimate relationship between the *State* and its subjects than hitherto theorized. Agrawal (2005) details a Foucaultian process through which *State* technologies of environmental control (often associated with power-laden ideas and discourses) interact and coevolve with environmental *subjects* (and their knowledge) resulting in the creation of new visions for

environmental objects. A constant promulgation of novel technologies is creating a continuously shifting terrain of new subjectivities, mediated by political economies of scale, and created through policies and practices. However, the frequent outcome of such processes that Li (2005, 389) labels as "rendering technical the domain to be governed" is the construction of simplified models of complex social-ecological worlds. This oversimplification results in contradictory interactions between diverse environmental (and social) institutions and associated policies, land-use practices, economies of scale, and efforts to conserve biodiversity (Robbins 2004). This research focused on such ever-shifting, interactive dynamics, and their frequently unforeseen consequences for rural livelihoods as well as biodiversity conservation efforts (Sharma, Madhusudan, and Sinha 2012).

Prior to 2003, social relationships in and around Manas developed from historical connections between Bodo cultural and political self-determination, small-scale agro-producers, and centralized authority. Now, I argue, relationships between the State, society, and nature are being transformed to produce new assumptions about the Manas landscape. I also explore how best to achieve biodiversity goals in a complex milieu of immigration-induced demographic change, territorial struggle, and a dwindling share of agricultural production in Assam's gross domestic product. Promising important contributions from theory to practice, this research sought to understand the development of such assumptions, and the outcomes these 'ways of knowing' had at landscape and social levels.

1.4 RESEARCH OBJECTIVES AND QUESTIONS

There are two main objectives of this research: a) examine the development of a 'tribal' identity and its implications for the governance and political economy of the MTR, and b) determine how forest resource-user livelihoods are negotiated and produced through discursive and material practices (Bebbington 1999; Sundberg 2006) embedded in a "multi-jurisdictional" legislative (forest laws) and administrative (forest policy) matrix pertaining to forest conservation and management (Kumar and Kerr 2012, 760). It aims to answer three closely related ***questions***:

1. *How is a self-realized, ethno-regional, 'tribal' identity utilized to mediate access to resources within or on the fringes of Manas?*
2. *How are different ethnic groups utilizing land either within or on the fringes of Manas?*
3. *How are such land-use and associated practices being mediated by formal and informal institutions of land occupiers, civil society, and the State?*

1.5 STUDY SITE

The MTR covers 2837 sq. km. of tropical moist forests directly south of the foothills of the Bhutan Himalayas (*see Figure 1.1*). Manas includes a UNESCO 'world heritage site' (WHS) and is part of the Indo-Burma 'biodiversity hotspot' region (Conservation International 2012). It was initially established as a 360 km^2 sanctuary in 1928 on what was once the hunting preserve of the royal families of Cooch-Behar and

Gauripur. In 1973, Manas was created under the 'Project Tiger' initiative (Panwar 1982), with the 391 sq. km. Manas wildlife sanctuary as its 'core' area, and the remaining 2446 sq. km. of 'buffer' zone divided among a number of Reserved Forests (RFs). In 1990, the core of Manas was upgraded to a national park (NP) with an increase of its land area to 526 sq. km. Finally, in 2016, an additional 350 sq. km. was added to the NP, thus giving it a total coverage of 876 sq. km.

Manas is home to a number of mammal and bird species classified as 'endangered' by the International Union for the Conservation of Nature (IUCN Red List), at least one 'critically endangered' mammal (the Pygmy Hog) and one 'critically endangered' bird (the Bengal Florican). This research was confined to the Kachugaon, Ripu, Chirang, Manas, and Kuklung RFs (*see Figure 1.2*), located within the districts of Chirang and Kokrajhar which, in turn, are part the semi-autonomous political unit within Assam, the BTAD (also known as Bodoland) (*see Figure 1.3*). Extensive land occupation ithin and natural resource use from these RFs by a diversity of ethnic groups made them an ideal site for this study.

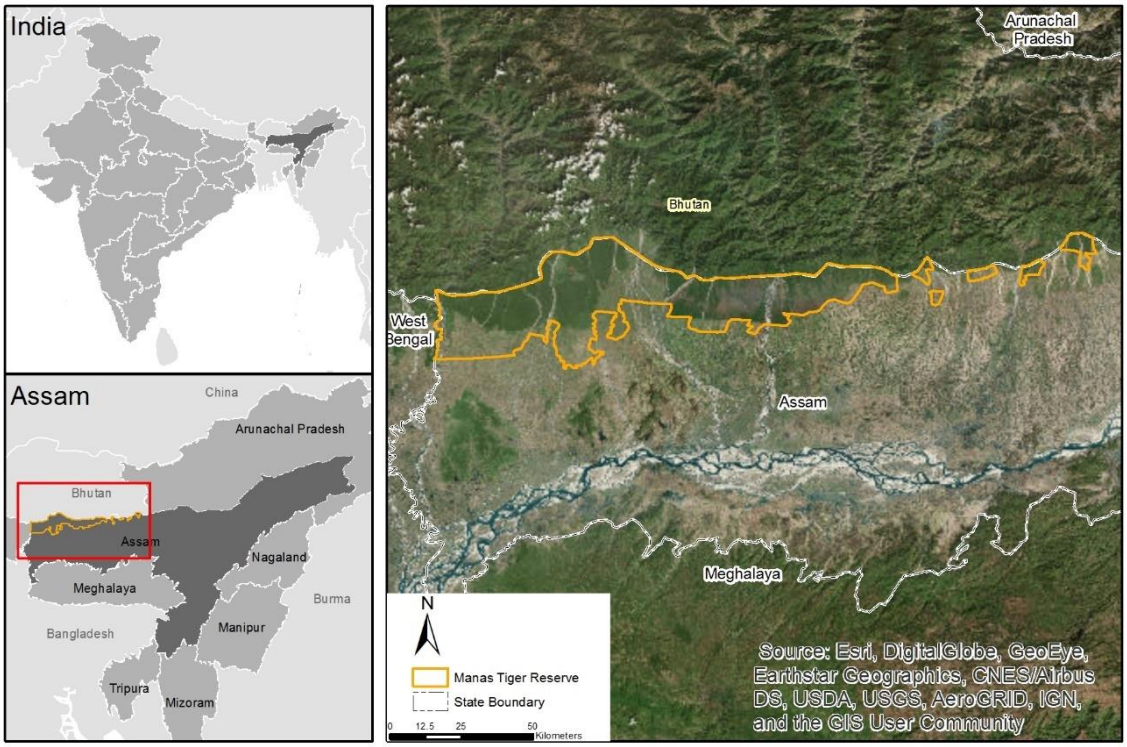

Figure 1.1. Location of the Manas Tiger Reserve with reference to India and Assam (*prepared by: Wildlife Trust of India*)

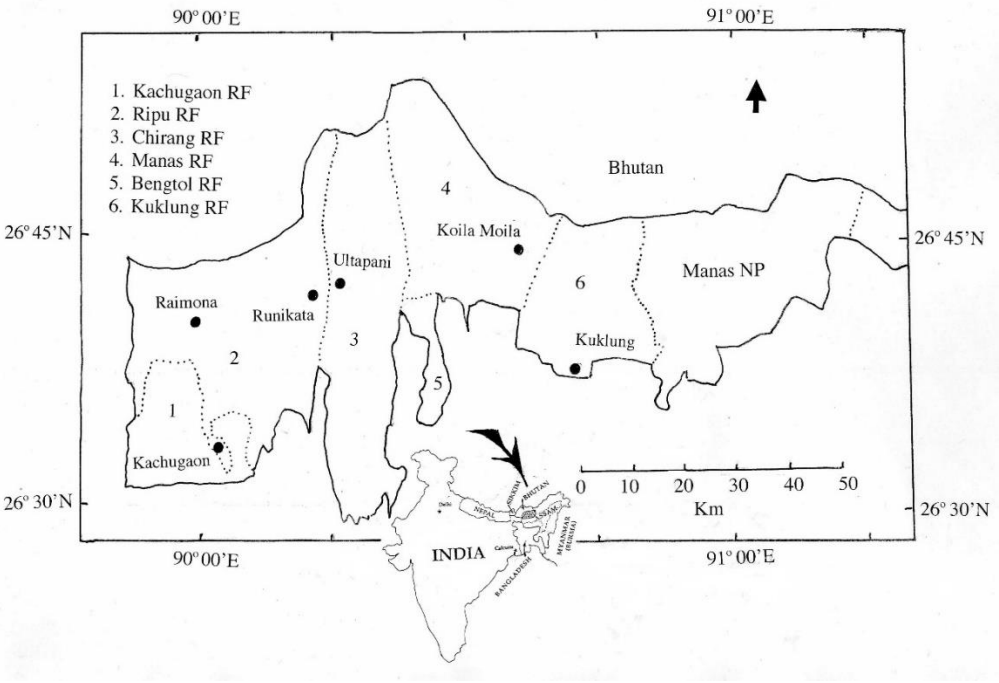

Figure 1.2. Map of the western Reserved Forests of the Manas Tiger Reserve [*Reproduced with permission from Allendorf et al. (2013)*]

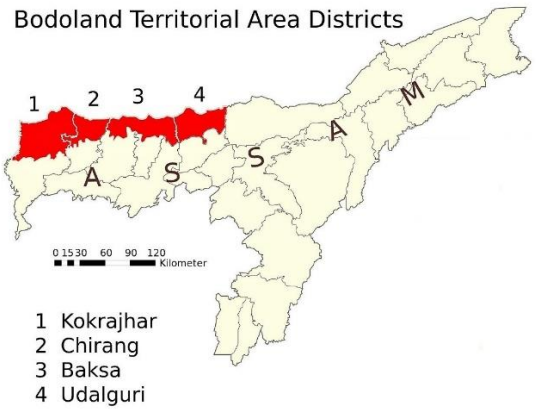

Figure 1.3. Location of the Bodoland Territorial Area Districts within the state of Assam [*Adapted from Furfur (2015), Wikimedia Commons, Wikipedia*]

1.6 METHODOLOGY

This research was ethnographically informed and included the collection of both qualitative and quantitative data.

Table 1.1 Summary of interview respondents

Stakeholder	Number of Respondents
Government	16
NGO	13
Civil Society	3
Academic	8
Journalist	3
Security Force	3
Surrendered Militant / Insurgent	2
Conflict Refugee	3
Resource User (Household)	210
Total	**261**

1.6.1 Participant Observation

I conducted participant observation with groups steering forest patrols within Manas with the aim of furthering my understanding of resource use and extraction from RFs, and the governance of the Tiger Reserve. The process involved building rapport with key individuals, spending extensive periods of time simply “hanging out”, having

long, open-ended conversations, and being in the forest with patrol parties (Bernard 2011). I obtained wide-ranging data and an in-depth understanding of the ideologies, policies, and practices of those who are tasked with managing the forests of Manas, as well as those whose livelihoods depend on the landscape. Though this method was particularly useful for addressing research question #3, it yielded data relevant to all objectives of the study.

1.6.2 Structured Interviews

Structured interviews were designed to primarily address research question #2 and obtain data on livelihood production in the Manas landscape (*See Table 1.1*). Respondents were queried about history of land use, household demographics, agricultural practices, means of income generation, and forest resource use (see Appendix A for complete list of questions). All interviews were conducted by trained field assistants who were familiar with local languages (e.g. Bodo, Assamese, and Bengali). Though sampling was intended to be stratified by ethnicity, type of land ownership, followed by randomized selection of households to be interviewed, existing field conditions did not allow for the intended mode of data collection. Manas was, and continues to be, a zone of ethnic and political conflict with at least one militant insurgent group that was active throughout the course of this research. Ethnic flare-ups, political unrest, kidnappings, killings of both militants and security forces, all combined to significantly impede access to rural households, especially those in close proximity to or within Manas.

1.6.3 Semi-structured Interviews

I conducted semi-structured interviews with a diversity of stakeholders involved in livelihood production, environmental governance, academic research, media services, civil administration, and security provision (*See Table 1.1*). Though interviewees were approached with a list of questions to give the process adequate structure, I allowed for departures that held the promise of generating new or unexpected information. These interviews informed all objectives of this research and provided some of the most detailed histories of the Manas landscape, often based on lived experience. Interviews lasted from thirty minutes to two hours in duration and were all recorded on digital voice recorders and subsequently transcribed. They were conducted in either Hindi or English.

1.6.4 Key Informant Interviews

Key informants were selected for multiple interactions that included both semi-structured interviews and unstructured conversations based on their possessing specialized knowledge about the objectives of this research. In general, their knowledge was more detailed, wide-ranging, and privileged than the average person. The position of some key informants as "gatekeepers" of relatively reticent institutions (e.g. the Indian Forest Department) not only provided information about the inaccessible inner workings of such organizations but enabled access to additional members of those institutions (Payne and Payne 2004). Information gleaned from this category of interviewees highlighted processes that were relevant to the governance of Manas, as well as

livelihood production within my study site. Given the scope of their specialist knowledge, interactions with key informants would frequently exceed two hours.

1.6.5 Archival Research

I utilized the 'National Archives of India' located in the city of New Delhi, the 'Assam State Archives' situated in the city of Guwahati. I also accessed the 'Archives and Manuscripts' section at the British Library in London, as well as the Oxford University library to collect data relevant to the administrative, legislative, economic, and socio-cultural history of my study area. The archives in India were both beleaguered by administrative red-tape, overall inefficiency, and dated technologies, all of which combined to limit the amount of usable data that I could glean from these institutions. Information obtained through this methodology was invaluable in contextualizing what I observed during my field research.

1.7 TIMELINE

Field research for this study was conducted intermittently between the Summer of 2012 and Spring of 2016. A pilot survey that commenced from June 2012, which was intended to be for a duration of three months, was cut in half by widespread ethnic conflict that broke out in the study area in mid-July 2016. However, the truncated effort did generate preliminary data that helped refine my proposed study, and established key relationships that proved invaluable for subsequent research.

From June 2013 to April 2014, I set up base in the town of Bongaigaon and commenced field research. I conducted semi-structured and key informant interviews in Bongaigaon, as well as in proximate towns and villages. I made multiple journeys into rural areas adjoining the boundary of Manas, and to settlements within to interview residents about the ways they make their living. Additionally, I made several visits to the city of Guwahati which contains within it the capital and administrative center of the state of Assam—Dispur. In Guwahati, I conducted several semi-structured interviews of government officials, academics, and journalists with knowledge relevant to the governance of Manas in addition to gleaning the Assam Archives.

I conducted a follow-up visit from January to March 2015. The two principal objectives were to i) carry out some additional interviews and a few follow-up conversations, as well as ii) oversee my doctoral advisor's formal visit to my study area. In total, I spent over 16 months in the field as part of my doctoral research.

1.8 SIGNIFICANCE OF THE RESEARCH

This research made important contributions at different levels, from theory to practice. Using a multi-method approach, it bridged a critical gap in the literature by explaining how encroaching households within protected areas are active agents of political, social, economic and ecological change, rather than merely passive victims of policies, economies, and socio-cultural dynamics. It accomplished this by examining livelihood, ecologies, environmental governance, and resulting forms of social organization as inextricably linked processes, wherein power residing within political,

economic, and policy networks is rarely a simple top-down or bottom-up framework. A profound exploration of the connections between social organization and household-level practices also had material implications for the ecologically diverse agro-ecological landscapes that such noncompliance communities occupy. Academic discussion on land-cover change has recognized the need for case studies and theoretically robust analyses that directly relate actual land-cover transformations to economic, institutional, policy, and political change (Lambin et al. 2001; Rudel et al. 2005). This project addressed this need by articulating quantitative data with the thick-descriptive methodology of ethnography (e.g. semi-structured interviews, etc.), and to discourse analysis (of official documents and programs). By doing so, the research provided important insights into the ways *State*-led governance, commodity production, and environmental management intersect in the increasingly inter-connected socio-ecological environments that we live in. Furthermore, it also offered an understanding of the effects of this interaction on landscapes of biodiversity protection and people.

This research was conducted under the academic and financial umbrella of the Applied Biodiversity Science (ABS) program at the Texas A&M University that was established as an NSF-IGERT-funded interdisciplinary program with a focus on biodiversity science and conservation (Texas A&M University 2017). Identifying a disconnect between *theoretical* and *practical* engagements with environmental conservation, the program aims to address the divide through a combination of encouraging cross-disciplinary research and engaging with conservation practitioners. This study aligned with the ABS' explicit recognition of conservation as a social process

that includes power relations (tribal identity politics), economic value (livelihoods), and institutional dynamics (government, NGO, and civil society).

1.9 DISSERTATION FORMAT

In addition to this introduction, the dissertation is divided into four chapters and proceeds as follows. Chapter II details a socio-cultural and political process that is key to understanding governance (environmental or otherwise) of Manas. It outlines the development of a self-realized, ethno-regional identity by the Bodos as a *tribal* community, and how this identity is utilized to access power and vital resources in the Manas landscape. I relied on Li's (2000) proposition that a community's "self-identification as tribal" is neither organically generated nor externally imposed but is rather a "positioning" that is filtered through particular histories, ecologies, cultural meanings, and "emerges through particular patterns of engagement and struggle" (151). I demonstrated that the current Bodo tribal identity was produced through colonial and postcolonial understandings of Bodo cultural norms, ecological practices, and Bodo engagement with the resulting policies of the State. In doing so, Bodos utilized both the multifarious ways in which they see themselves, as well as the normalizing gaze of the State to position themselves as autochthons, as ecologically-minded forest-dwelling tribals, as a marginalized underclass, and as socio-culturally distinct from mainstream Assamese groups. They did so while opposing attempts of other groups to obtain tribal classification, contesting land rights of other forest-dwelling communities, and using political power to marginalize non-Bodo communities.

In Chapter III, I used a political ecology framework that compares *de jure* with *de facto* land use within the boundaries of established protected areas (Robbins et al. 2009), specifically to understand the economic and demographic nature of resource use that falls under the umbrella term *encroachment*. Furthermore, I explored the role of tropical forest resources as a form of "natural insurance" that enable smallholders to cope with crises through consumption and sale (McSweeney 2004). I accordingly collected and analyzed household assets data, as well as the influence of economies of scale and culture on subsistence tactics to examine variation in forest resource use among different ethnic groups in the Manas landscape (McElwee 2010). I revealed the importance of land as a site for livelihood production, as a commodity for countering risk, and as a source for critical resources (both commercial and otherwise) in a landscape with scant options for income generation. I also detailed the deployment of an array of strategies (cultural, political, economic), both legal and illicit, by a diversity of ethnic groups to survive in a landscape of limited opportunities.

Chapter IV details the gap between environmental legislation and its implementation across the Manas landscape. I demonstrated how environmental policy, legislation, and practices of colonial and postcolonial governments have been mediated by both institutions of the State as well as by those (formal and informal) ethnic groups that inhabit the study area. Utilizing detailed semi-structured interviews, archival research, I identified the gap, and subsequently explored the networks of power that maintains it, as well as the beneficiaries and losers. I revealed the constellation of institutions and the diversity of institutional strategies that were deployed to maintain the

gap between environmental laws and their enactment, and to simultaneously benefit from such an opening while attempting to curtail potential advantage to other groups.

In the fifth and concluding chapter, I summarized the results from this study, highlighted the inter-connectedness of the previous chapters, and provide an overall understanding of the governance of the Manas landscape through the ideologies, policies, and practices of key stakeholders. Finally, I provided directions for further research.

CHAPTER II

BODO INDIGENEITY AND THE DEVELOPMENT OF A TRIBAL IDENTITY IN COLONIAL AND POSTCOLONIAL NORTHEAST INDIA

2.1 INTRODUCTION

The concept of indigeneity draws on various intellectual strands within the broad field of political ecology through its engagement with cultural identity. Cultural identity is conceptualized as conditional, and co-constituted with the physical world, and how cultures adapt to environmental change, and the political economy of agricultural production (Li 2000; Radcliffe 2015). While challenging Orientalist stereotypes, initial conceptualizations of indigeneity as located in the relationship between cultures and their physical environment contributed to stereotypically equilibrium-based portrayals of such relationships, and indigenous people as inherent environmentalists (Conklin 1997; Nadasdy 2005). Such characterizations of indigenous people concomitantly led to understandings of their habitation and utilization of circumscribed land as human rights through specific terminology ("territories"), thus organizing them into discrete, bounded areas or "traditional lands" which they were believed to use for their "subsistence and traditional activities" (International Labour Organization 1989). The Convention made scant effort to describe what "traditional" meant, either in terms of land or practices of its production. Thus, a long, colonial tradition of enclosing indigenous or *tribal* land and its use within arbitrarily conceived boundaries of occupancy and livelihood production continued. Furthermore, in defining their production as "subsistence", the Convention

obscured extensive documentation of indigenous articulation with market economies. In creating habitational enclaves of exclusivity, it erased long-standing socio-cultural, political, and economic ties with 'non-indigenous' communities (Li 2010).

The foundation of current indigenous policy and politics in India was laid during the colonial era through use of "anachronistic thought" that ranked societies according to "race theories" and "modes of subsistence", and was closely linked to social evolutionist beliefs and theory popular within the field of anthropology at the time (Skaria 1997, 728). In India, the term *tribal* has historically been used to denote the original inhabitants of an area, commencing with British rule. Colonial writings are replete with references to *tribal* communities which were frequently portrayed in particular ways. They were seen as chiefly inhabiting remote, wild areas (forests, hills), in isolated, closed social groups, practicing animistic religion, conducting simple, unsophisticated agriculture (shifting cultivation), not possessing written scripts, and belonging to primitive races (Karlsson 2001). *Tribal* societies were simultaneously ascribed, occasionally to the point of stereotypical excess, with a slew of laudatory traits such as being considered noble, independent, honest, and simple. The result was the production of a "noble savage" construct as antithesis to the fall from grace of the industrial European (Redford 1991). Such paternalistic constructions, in turn, created the policy space for colonial administration to view *tribal* people as in need of protection and improvement through specific modes of governance, since the latter were perceived as being incapable of doing so on their own (Li 2008).

Academics have subsequently subjected the concept of the *tribal* in India to extensive analyses that have demonstrated its definition as replete with vagueness and ambiguity. Critical assessment of the term's traditional grounding in claims of circumscribed spatiality, socio-cultural isolation, restricted modes of livelihood production, lack of articulation with larger economies of scale, and unique cultural beliefs and practices, has resulted in challenges to its validity (Béteille 1986; Béteille 1998). As in the case of other cultures, *tribal* communities and their associated cultures are not static entities. *Tribal* groups in India have ruled over large areas in the form of dynasties, had extensive histories of contact with non-*tribals*, varying degrees of economic and livelihood specialization, and incorporated religious and other cultural elements from neighboring communities (Corbridge 1988). A key component of the overall colonial production of the Indian *tribal* was an assumption of the widespread presence of culturally-based ecological ethics among such communities that led to prudent, sustainable natural resource use (Gadgil, Berkes, and Folke 1993). Such discursive essentialisms of *tribal* ecological sustainability have been widely challenged through research in India (Sinha, Gururani, and Greenberg 1997; Shah 2007a) and in other parts of the globe (e.g. Redford 1991; Denevan 1992; Kay 2007; Li 2010).

The post-independence Indian Constitution has uncritically adopted the colonial concept of the *tribe* (specifically *backward tribes* as per the Government of India Act, 1935), codified it into law through the creation of a formal category, the *Scheduled Tribe* (henceforth *ST*), and by binding it with explicitly delineated geographic space, crystallized a *tribal* identity through sealing the "boundaries between tribe and non-

tribe" (Béteille 1986, 318). The relevant Constitutional Order (1950) promulgated a list of communities deemed *ST*s, which have been afforded affirmative action in the form of reservations, e.g. in government jobs, academic seats, and political positions. Because of tangible benefits to *ST*s, there has been an unending succession of communities that have and continue to agitate for acquiring that status. Certain *ST*s are currently attempting to articulate with a more recent and globalized political domain – the United Nations category of *indigenous peoples*. This term utilizes temporality of settlement as its defining standard, a criterion that is particularly difficult to establish in most parts of India—given long, complex histories of migration and residency. Additionally, the *indigenous peoples* category has been subjected to much of the same criticism directed at the *tribal* slot. Nonetheless, Indian *tribal* groups and supportive NGOs have continued to push for *indigenous peoples* status, using a discourse of subjugation, exploitation, and overall marginalization, while articulating with a global *indigenous peoples* community in demanding the "right of self-determination" and the restoration of "land and forest rights" (Karlsson 2003, 407).

Anthropologists Bengt Karlsson and Alpa Shah, while recognizing the ambiguities, vagueness, and contradictions inherent in the ST and *indigenous peoples* slots, caution against an over-emphasis on critical analyses of the terms (Karlsson 2003; Shah 2007a). Instead, they draw attention to the political spaces these terms create, as well as the strategies utilized by *ST*s and *IP*s to situate themselves within these spaces, and subsequently negotiate them to further particular agendas. In the words of anthropologist Tania Li (2000), indigeneity is "not natural or inevitable, but neither is it

simply invented, adopted, or imposed. It is, rather, a positioning which draws upon historically sedimented practices, landscapes, and repertoires of meaning, and emerges through particular patterns of engagement and struggle" (Li 2000, 151). The discourses associated with these socio-cultural categories and political spaces may permit certain articulations while simultaneously excluding or suppressing others. Political power generated from the working of such spaces may not be equally shared, or might be utilized to politically suppress others. Access to these spaces may not be equally available. I utilize such dynamics to study how a so-called *tribal* ethnic group, the Bodos of western Assam, leverage an ethno-regional identity as a Scheduled Tribe that is simultaneously externally-generated and self-realized, to access key resources both within and on the fringes of the MTR.

2.2 STUDY SITE

In addition to their rich non-human biodiversity, the Duars have historically been home to a multiplicity of ethnic groups and form the political and economic gateway between the northeast and the rest of the Indian subcontinent. Their pre-colonial history of such groups is steeped in extensive use of the Manas forests to satisfy a variety of socio-cultural, political, and economic needs (Misra 2007a). Such utilization continued in the colonial period with the British using Manas as a major source of timber to fulfill key administrative goals. In line with this overarching political and economic philosophy, the British attempted to replace diverse, shifting, largely subsistence systems of agriculture with sedentary agrarian production.

The colonial encouragement of more intensive modes of agriculture went hand-in-hand with an explicit policy to encourage immigration of ethnic groups that were viewed as steeped in the political economy of such production. Thus, unprecedented influx of immigrants from East Bengal (*East Pakistan* post-1955; *Bangladesh* post-1971) into the erstwhile Goalpara district (included the Duars) commenced from the second decade of the twentieth century and continued into the post-independence period. This movement was driven by a combination of agro-ecological as well as political-economic developments in erstwhile East Bengal and Assam and resulted in thousands of East Bengali (henceforth *Bengali*) peasants moving into areas officially known as *wastelands* and *grazing reserves* (Saikia 2011). These land parcels were not under intensive utilization and thus not contributing to the colonial economy either through the generation tax revenues or agricultural produce. The value of such lands to the shifting, subsistence mode of production and pastoralism of local communities (e.g. Bodos) was not factored into the administrative calculus.

2.3 METHODS

This chapter utilizes data from research conducted between 2013 and 2016 amongst personnel of the Indian Forest Department (IFD), civil society groups, and rural households, residing adjacent to the three large Reserved Forests areas that constitute approximately three-quarters of the entire land area of Manas – Ripu RF, Chirang RF, and Manas RF. Fifty five detailed semi-structured interviews with IFD personnel, academics, journalists, members of civil society groups, as well as formal surveys of 215

agrarian households, supplemented with extensive archival research, and media studies, were utilized to evaluate the ideological, discursive, and in-practice forms of the *tribal* identity in the Manas landscape.

2.4 BACKGROUND, CONTEXT, AND RESULTS

2.4.1 The *Tribal* Slot in Colonial India

The history of the colonial administration's engagement with India's *indigenous* communities is rooted in a "project of imagination" that classified, normalized and created otherness through a power-laden discourse and ultimately emphasized Europe's preeminence over "Oriental backwardness" (Jewitt 1995, 67). While Orientalist thinking was applied by the British to the entire populace of the subcontinent, certain communities that came to be seen as "*tribal*s" were considered descendants of the "original inhabitants of India" (Skaria 1997, 729) who were genealogically and culturally distinct. The construction of the Indian *tribal* was part of an ordering of complex landscapes and the cultures that inhabited them with the imperative of making them amenable to the overall colonial project. It was informed by European anthropological thinking that ordered communities in a unilinear hierarchy of "social evolutionism" (van Schendel 2011). *Tribal*s were placed at the bottom of this intellectual ladder through socio-cultural and ecological characteristic, as well as their physical appearance (Shah 2007b). Such was not always the case. For example, in precolonial, central India, though "new states acted as the agents of Sanskritisation", *tribal* groups predominantly articulated with non-*tribal* communities through "a complex social

economic system" rather than being based on language, religion, and cultural separateness (Singh 1978, 1225). *Tribal* chieftains actively encouraged the settlement of non-*tribal* groups on their lands since the latter possessed technologies of agriculture capable of generating the kind of productive surpluses required by larger state formations that the former were part of. They were not averse to sharing "in the goods that civilization could yield" and utilized negotiated political alliances, strategic martial force, and sophisticated geographic as well as ecological knowledge to access the benefits of 'civilized' agrarian economies (Guha 1996, 153).

As in other parts of the world, Indian *tribal*s were frequently linked with forested landscapes. The colonial discourse of primitiveness that was typically utilized in the cultural, political and ecological construction of *tribal* identities drew its key intellectual elements from an essentialized understanding of them as *people of the forest* or as denizens of land that was not cultivated. In the south Asian language, Urdu, the word "jangal" refers to the presence of "true forest, with taller, older, denser trees" and is understood as the abode of the "feral" and the "wild" (Dove 1992, 238, 239). The hunting, shifting cultivation, forest dwelling, oral traditions, and virtually devoid-of-clothes existence of *tribal* communities was construed as "wild, uncivilized and uncouth", and antithetical to the civilized who practiced settled agriculture, lived in the urban, possessed a written script, and covered their bodies with garments (Arnold 2004, 266). The classification of groups as *tribal* was fundamentally arbitrary, as was immediately evident in the significant differences between groups included within this categorization. It was "not so much a container of specific cultural traits…but rather a

term fixing a relationship of very unequal power" (van Schendel 2011, 21). However, colonial constructions of *tribal* identity were not without local precedent. Precolonial accounts of *tribal* communities made frequent references to "savage" and "forest-dwelling warriors" who were "antagonists of Brahmanical civilization" (Guha 1996, 136).

In addition to classifying groups as *tribal* and by extension, primitive and embodying symbols of 'wildness', the colonial administration routinely described them as unruly, fractious and ungovernable, thus establishing a logic to avoid establishing administrative frameworks within *tribal* areas (Sivaramakrishnan 1996). The colonial administration's overwhelming mandate was the generation of revenue and the production of commodities, and it justified its relative administrative absence by portraying *tribal* economy as unsophisticated. For example, the agricultural practices of *tribal* groups were depicted as environmentally destructive, insufficiently articulated with market economies, and not geared towards surplus production (Corbridge 1988). Hence, colonial officials found "little evidence of stable polity and thus no convenient locus of governance for their purposes" which in turn resulted in a landscape that was not "legible" to the political economy of the British Raj (Sivaramakrishnan 1996, 246).

The administrative gaze of the colonial government was not static however, and this was especially as it applied to forested landscapes. It was constantly creating as well as modifying existing policy and associated legislation with a primary focus on generating revenue and valuable commodities, as well as necessary enabling infrastructure to further this mandate (Saikia 2011). In pursuit of this political and

economic imperative, the British ignored the history of the utilization of forest landscapes by *tribal* communities. Post-cultivation secondary forests were characterized as 'pristine' and set aside exclusively for forestry operations as 'Reserved Forest'. Mixed forest-scrub systems in the proximity of *tribal* settlement that were utilized by local communities as commons for grazing and for the extraction of a diversity of forest products were labeled as *wastelands*, thus implying that were not being utilized in an efficient and productive manner. Such land units were subsequently leased out or sold for a variety of intensive production ranging from timber extraction to particular forms of agriculture (Sivaramakrishnan 1997; Sharma 2009).

The policies of the British government with regard to *tribal* communities were continuously shifting and contradictory primarily because they stemmed from an unstable discourse that interacted with key colonial mandates as well as *tribal societies* that were socio-culturally, politically, and economically complex systems (Li 2010). The continuous effort to render such systems legible to circuits of capital and affiliated political institutions resulted in oversimplification and administrative "zones of anomaly" (Sivaramakrishnan 1996). One such generalization was an official discourse of *tribal* people as being culturally oriented towards residing in compact, limited areas. This spatial fixing and limiting had diverse implications for *tribal* self-realized identities during the colonial era and continues to do so to this day (e.g. Srivastava 2008).

2.4.2 The *Tribal* Slot in Western Assam

The political area that serves as a useful space to anchor *tribal* history in western (or Lower) Assam are the Duars which form the foothills of the Bhutan Himalayas as well as the floodplains of a multitude of rivers originating from the mountains. In pre-colonial times, the Duars were ruled by chieftains (locally known as *Rajas*) who in turn were in tribute-based relationships with the Bhutanese emperor (or *Deb Raja*). The British formally annexed the Duars in 1866 following a war with the Deb Raja (Rennie 1866). A diversity of closely-related ethnic groups had inhabited the Duars since prior to written records. Since most of them had exclusively oral traditions, there is scant information on their socio-cultural, political, economic and ecological history. In pre-colonial times, the Duars were part of the "Koch Hajo" kingdom which was "populous and rich" (Guha 1982, 499).

The Bodos are one of a number of ethnic groups with cultural and linguistic affinities that are collectively known as the *Bodos, Kacharis, or Meches* (hereafter, Bodo). Different Bodo groups held socio-political dominance over different parts of modern-day Assam till approximately the thirteenth century. They were described as "aborigines, or earliest known inhabitants, of the Brahmaputra valley" (Gait 1906, 242). As in the case of other *tribal* communities, the colonial administration's overarching characterization of Bodos was one of backwardness and primitiveness. In the words of an officer of the colonial Civil Service, they were, "like most of the aboriginal races of Assam, cheery, good-natured, semi-savage folk; simple, trustful, but incorrigibly disrespectful according to Indian notions of good manners" (Endle 1911, xiii). Such

attitudes were followed up with a paternalistic approach necessitating protection as well as largesse to help set them on a path from perceived primitiveness to modernity.

Colonial imaginaries of the Bodo people constructed them as forest dwellers through explicit linkages with the "rankest vegetation and primitive jungle" (Rennie 1866, 348).

Though the colonial administration viewed them primarily as agriculturists, they were described as being practitioners of shifting cultivation. The colonial-era ethnologist and linguist, Brian Hodgson stated that 'agriculture' in the Bodo language was "expressed by the term 'felling' or 'clearing the forest'" (Hodgson 1880, 103) and described them as "erratic cultivators of the wild" (Hodgson 1849, 714). Hodgson articulated with social evolutionist thinking in his pronouncement of Bodos as having "passed beyond the savage or hunter state, and the nomadic or herdsman's estate, and have advanced to the third or agricultural grade of social progress, but so as to indicate a not entirely broken connexion (*sic*) with the precedent condition of things; for, though cultivators, all and exclusively, they are nomadic cultivators" (1849, 714). In addition to the discourse on ecological relationships, Bodos were attributed with an overall socio-cultural preference for residing in close proximity to forests and were frequently described as having an affinity for such landscapes or alternatively, an aversion to settling away from them (Hunter 1876). Their overall relationship with their physical environment was characterized as being one of human nature in its pristine state.

When the economic gaze of the colonial administration settled on the geographic space of the Bodo *tribal*, it encountered vast stretches of forested land with the potential

for generating revenue from the conversion of forests to agricultural production, as well as timber for a diversity of administrative and commercial needs (Saikia 2011). In doing so, the British also encountered a complex, layered, and fluid political economy that consisted of a diversity of actors (peasants, landlords, chieftains, kings) and territories (villages, estates, chiefdoms, kingdoms) interconnected through a political structure lacking in absolute authority. Varying tributes and rents mediated power relationships within this ambiguous polity and a vibrant system of "markets and fairs" were the nodes of a vast "trading network" enabling material exchange (Misra 2005, 232). The imperative to effect control over this intricate system with its enormous economic potential required considerable ontological standardization through promulgation of particular ways of knowing landscape and people, and that is precisely what the British set about doing.

Colonial discourses functioned as searing criticism of native economic and political institutions. Local trade practices were labeled as "obstacles in the growth of free trade" whereas local markets were deemed venues of cheating, fraud, and oppression of the less powerful, particularly of *tribal* communities (Misra 2005, 241). Traditional systems of political tribute and tax collections were characterized as oppressive and predatory. The necessity of navigating complex political and economic landscapes with the aim of restricting local agency and enhancing colonial power and control resulted in contradictory policies and practices. For example, *tribal* communities were simultaneously portrayed as savages when coercively or violently attempting to level political and economic playing fields in the form of raids, as well as 'in need of

protection' when powerful entities were attempting to extract taxes or tributes from them. Such descriptions greatly exaggerated and oversimplified nuanced, ambiguous strategies for adjusting inequities, and ultimately set the stage for the reconceptualization of political space and "legitimized the use of military force and the subsequent annexation of the Dooar region" by the British (Misra 2005, 244).

This redrawing and subsequent concretization of political and economic space was both accompanied and supported by a fixing of cultural boundaries around *tribal* populations. Colonial officials and social scientists simultaneously identified communities as distinct *tribes* as well as members of a *tribal* collective. For example, the Garo tribe was considered a member of the 'Bodo' *tribal* category in early colonial socio-cultural assessments of western Assam (Hodgson 1849) but was treated as a distinct group in subsequent official documents that provided an administrative logic to exclude them from the political space of the Goalpara district, thereby consolidating British control over the area (Misra 2005). As in other parts of the Indian subcontinent, the conflicting discourse of the administration was acutely evident with regard to the environmental space that was of particular value to the colonial gaze—forested landscapes (Guha 1990). In an effort to generate agricultural revenue, existing forested landscapes in the Duars were labeled "waste-lands", described as areas of "culturable waste", and the resident *tribal* communities characterized as "bad agriculturists" whose "rude and temporary cultivation" practices did not allow for land "to be permanently and successfully retained for cultivation" (Government of India 1899, 106). Such essentializing discourse was, however, not exempt from administrative arbitrariness.

Bodos, who were considered unsophisticated farmers in the mid-nineteenth century, were, by the close of the 1800s, described as a "remarkably fine peasantry with a very superior cultivation of the permanent kind" (Sanyal 1973 as quoted in Misra 2005, 219). This discursive shift reflected the colonial need to align land use practices with an overarching economic logic after wresting political control over the Duars.

The management of Duar forests for timber production similarly necessitated the creation of a standardizing knowledge of the ecology of both forests and *tribal* people. This was achieved through a twin process of ordering land in discrete units with an explicit goal of timber production, as well as portraying *tribal* land use practices as problematic to the development of this forest commodity. Livelihood strategies of *tribal* woodcutters, farmers, and hunters were described as the "reckless" practices of "ignorant and simple people", their impacts on forests as destructive, and the prescription was "protection" through the creation of forest "reserves" accompanied by "patient teaching of the villagers by Forest and Civil officers" (Mann 1876; Mann 1879). The ordering of forested landscapes in the Duars in the form of Reserves severely restricted all forms of *tribal* forest access, thereby demarcating Reserved Forests for the exclusive production of a single resource—timber. In doing so, the colonial State faced a dilemma in that it needed *tribal* labor for the successful extraction of this resource. While acknowledging that these communities of the Duars since "time immemorial have worked in the forests as woodcutters" (Perree 1908, 2), and possessed considerable skill and expertise in this regard, they were viewed as valuable only when working the forest in a manner consistent with the extractive interests of the state.

Hence, the construction of an essentializing forest identity of the *tribal*s involved considerable contradictory pronunciations. Precolonial extraction of timber by these communities was viewed as "indiscriminate felling" that exhausted timber potential of Duar forests (Lloyd 1894). Additionally, the colonial forest department considered forest fires to be detrimental to the overall ecological health of these ecosystems and made "fire-protection" a management priority. It identified a diversity of land use practices by *tribal* people as the sources of such incidents. In accordance with this discourse and to justify associated prescriptive policies and practices, three categories of *tribal* use were explicitly identified as the culprits—woodcutters, farmers, and hunters. Woodcutters were perceived as setting "fire to grass to enable them to find and remove the dead timber", farmers as igniting "dried jungle on newly-cleared fields", and hunters accused of starting fires "in the most reckless manner to everything that is in their way to get at the game" (Mann 1876). Such discursive construction of *tribal* production and resource extraction bolstered the evolving policies of colonial forest enclosures (e.g. the Government Forest Act 1865) and involved the utilization of contradictory understandings, such as the shifting methods of cultivation or *jhum* practiced by *tribal* groups (Governor General of India 1865, 36). With the increasing designation of forest areas viewed as being of timber value as Reserve Forests, it was declared by the close of the century that *jhum*ing "is not practiced, nor has it been for many years" (Lloyd 1894, 3), thus attempting to restrict and standardize the spatial dynamics of *tribal* communities.

In summary, the 19th century, especially the second half was a tumultuous one in the history of the Duars. The colonial administration consolidated its control over land in general and forests in particular through specific conceptualizations of the socio-cultural, economic, political, and ecological landscapes of the Duars. The ways of knowing that arose from such understandings led to specific legislation and policy, which in turn generated a 'scientific' ordering of both land and people, as well as their interactions "as complicit in the expansionary dynamics of state and capital" (Robertson 2006, 384),thus creating particular *tribal* identities that would be utilized in a variety of political and economic situations in the course of the following century.

2.4.3 *Tribal* Identity Politics in Twentieth Century Bodoland

The advent of the twentieth century in the Duars was marked by two critical events that continued the shaping of Bodo identity – i) significant immigration from parts of East Bengal, and ii) the splitting away of Assam from Bengal as a separate province. The ramifications of the East Bengali immigration were heavily influenced by the extensive land-grab of the colonial government in the latter half of the previous century under the auspices of the Assam Forest Regulation of 1891 (Saikia 2011). This legislation enabled administrative control over forests identified as having valuable timber reserves (Reserved Forests) as well as large tracts of forested landscape that "worked both as ready stock for peasant cultivation and area to be brought under Reserved Forests" (Un-classed State Forests). The latter category subsumed vast areas of forest and mixed forest-grassland ecosystems that had earlier been classified as

wastelands. The separation of Assam from the Bengal Presidency contributed to the commencement of the crystallization of an Assamese identity centered around language (Misra 2006).

2.4.3.1 Immigration and the Politics of Land Tenure

The process of the gradual occupation of the historic landscape of the Bodos (and other *tribal* groups), primarily by ethnic Bengalis largely from certain districts (mainly Mymensingh, Rangpur, and Sylhet) of East Bengal had commenced in the early decades of the 20th century. Prior to that, Bengalis would seasonally work in Assam but settlement was relatively rare. It is noteworthy that both East Bengal and Assam together formed a colonial province from 1905 to 1912. The settlement of western Assam and modern-day Bodoland by East Bengali immigrants reached a peak in the years prior to and following the independence (from the British) and subsequent partition (into India and Pakistan) of the subcontinent. In the official census of 1931, the Superintendent of the Census Operation of Assam, C. S. Mullan (Mullan 1932, 49) unequivocally and dramatically stated that

> *probably the most important event in the province during the last twenty five years – an event, moreover, which seems likely to alter permanently the whole future of Assam and to destroy more surely than did the Burmese invaders of 1820 the whole structure of Assamese culture and civilization – has been the invasion of a vast horde of land-hungry Bengali immigrants, mostly Muslims, from the districts of Eastern Bengal and in particular from Mymensingh. This*

invasion began sometime before 1911, and the census report of that year is the first report which makes mention of the advancing host. But as we know, the Bengali immigrants censused for the first time on the char lands of Goalpara in 1911 were merely advance guard – or rather the scouts – of a huge army following closely at their heels. By 1921 the first army corps had passed into Assam and had practically conquered the district of Goalpara"

In another statement within the same document that seems to exceed the previous one in the use of dramatic imagery and gross stereotyping, Mullan goes on to say (Mullan 1932, 51)

> *"Wheresoever the carcase, there will the vultures be gathered together – Where there is waste land thither flock the Mymensinghias. In fact the way in which they have seized upon the vacant areas in the Assam Valley seems almost uncanny. Without fuss, without tumult, without undue trouble to the district revenue staffs, a population which must amount to over half a million has transplanted itself from Bengal to the Assam Valley during the last twenty five years. It looks like a marvel of administrative organization on the part of the Government but it nothing of the sort: the only thing I can compare it to is the mass movement of a large body of ants."*

In reality, the colonial administration of Goalpara was actively attempting to facilitate East Bengali immigration in *Wasteland* blocks "by the offer of special conditions" such as "zamindari tenures, with the concession of a revenue free period" (Kershaw 1905 as quoted in Misra 2007a, 436). Interestingly, it was not until the second decade of the century that significant immigration commenced in earnest, driven by a combination of demographic, agro-ecological, and political economic factors within East Bengal (Misra 2007a). Immigrants were aided in their attempts to obtain land through wealthy landlords or *zamindars* who allowed tenancy on their land in return for taxes. Additionally, the traditional land tenure system of *Zamindari* in western Assam had, during the colonial era, spawned an entrepreneurial class of rural landlords known as *jotedars* who were particularly instrumental in the conversion of wasteland areas into cultivable land. *Jotedars* would frequently act as middlemen between land-hungry immigrants and the *zamindars*, providing both land and credit to the former, making profits through the difference between the often-higher taxes they would extract from tenants than what they would pay to *zamindars*, and both sell and lease land. Land rents sharply increased in this time period, and many immigrants in turn became jotedars themselves resulting in "complex tenure chains" (Misra 2011, 109) that increased land under cultivation within a decade of the immigration by a ten-fold factor.

In addition to further changes to an already intricate system of land tenure, the East Bengali immigration brought with it significant shifts to the political economy of western Assam and the Duars. Immigrant farmers practiced more intensive forms of agriculture and were better integrated with larger market and associated credit systems.

In this regard, the impact of one particular agricultural commodity on the political economy of western Assam cannot be understated – jute. East Bengali immigrant farmers brought with them expertise in intensive jute production and integration with different market centers in the region specializing in this valuable commodity (Saikia 2015). Though *tribal* farmers in the Duars had historically cultivated a jute variety yielding a high-quality fiber, it could not compete with the volume of production by East Bengali peasants. *Tribal* farmers could not compete with immigrants with regard to accessing the superior credit lending systems that developed by the early twentieth century and the latter's sedentarized systems of production were viewed more favorably by the expanding political economy. Unable to pay ever-increasing land rents many *tribal* landowners and tenants were forced off their holdings and found themselves in increasing indebtedness (Misra 2011). Such processes began to engender an overall feeling among *tribal* communities that they were losing their land to 'outsiders' and would soon have nowhere to live or go to. The increasing fear of the 'land-usurping Bengali outsider' was further fueled by additional immigration around the time of the partition of the subcontinent in 1947 into the independent nations of India and Pakistan, with East Bengal becoming part of the latter as 'East Pakistan'.

2.4.3.2 Language as Identity: Becoming Assamese in Colonial Goalpara

Modern-day Assam became a part of the British Empire in 1826 and was subsequently included within the Bengal Presidency of which it remained a seamless unit till 1873. It subsequently underwent a period of progressive administrative separation from Bengal till the end of colonial rule in 1947, with a brief intervening

period (1906-1912) when it was appended with East Bengal (Baruah 1999). Despite the entire period of gaining administrative autonomy, Assam continued to be viewed as essentially an extension of Bengal, with the latter asserting its dominion through a complex system of socio-cultural, political, and economic hegemony (Misra 2014). When the British annexed the Duars from Bhutan in 1866, they became part of Assam, and were included in the erstwhile district of Goalpara in western Assam. As part of the protracted process of Assam achieving political independence from Bengal, *tribal* and non-*tribal* residents of Goalpara were part of a struggle that ultimately achieved autonomy for Assam through the creation of an Assamese identity primarily centered around linguistic distinctiveness (Misra 2011).

The district of Goalpara occupied a unique position as a physical and cultural borderland between the erstwhile Bengal Presidency and the emerging state of Assam. In the decades of the twentieth century prior to independence from colonial rule, the residents of Goalpara took a page from the colonial handbook in connecting linguistic identities to circumscribed and impervious geographic space. Identifying the widely spoken *Rajbanshi* language as a historical precursor to Assamese, Assamese nationalists proceeded to claim Goalpara as a legitimate part of Assam, thus hardening fuzzy boundaries of linguistic space to generate a particular political identity (Misra 2006). This project of self-reinvention was spearheaded by an increasingly assertive middle-class, itself a product of colonial education, against a traditional powerhouse of elite landlords whose political tilt was towards the Bengal Presidency. In true colonial fashion, the Assamese nationalist project in Goalpara drew simultaneously from the

"colonial linguistic project as well as from indigenous cultural reserves" (Misra 2006, 223). In a memorandum dated "8th August 1928", the Bodo, Rabha and Garo *tribal* communities collectively spoke out strongly against the prospect of the "transfer of the district to Bengal" and identified the "powerful" landlords as pushing for the same "against the will and interests of their tenants and majority of the bona fide inhabitants of the whole district." (Das 1928). In a memorandum submitted on behalf of the 'Bodo community of Goalpara District' (Ahmed 1929), Bodo leader Kalicharan Brahma voiced his community's opinion through a clear 'Assamese' positioning:

> *So far as we are concerned we opposed to it. Goalpara is a part and parcel of Assam and history will prove what part she has been playing from time immemorial. The habits and customs of the people of this district are more akin to Assamese than to Bengalee. We the Bodos can by no means call us other than Assamese. The transfer of the district to Bengal will be prejudicial to the interests not only of this community but of all other communities and this transfer will seriously hamper our progress in all directions.*

The irony of the utilization of *tribal* political capital by a growing Assamese nationalist movement led by a newly emerging urban intelligentsia was that it "threatened to subsume imaginings" of *tribal* polities (Misra 2006, 223). The considerable ethnic multiplicity of Assam, not to mention its linguistic diversity, was

always a problem for the homogeneity assumed by such a movement. Such non-inclusiveness coupled with a continuing paucity of development efforts contributed to the rise of various movements by ethnic minorities or *tribal* groups since the early 1960s. The modern-day Bodo movement for the establishment of an autonomous political space is one such example.

2.4.3.3 The Bodoland Movement

The roots of the Bodoland movement that essentially strove to establish an autonomous land for the Bodo *tribal*s in the latter half of the twentieth century had its roots in tumultuous political upheavals commencing in a postcolonial process of nation building in the late 1940s that resulted in the independent nations of India and Pakistan. The key outcome for northeast India in general and Assam in particular was the splitting away of East Bengal as part of Pakistan and this process of political fracturing engendered the sharpening of religious identities. Specifically, the East Bengali Muslim was labeled a 'foreigner' and perceived as an illegal infiltrator within the landscape of Assam and emblematic of the Bengali identity that was particularly influential in shaping of Assamese linguistic nationalism. The honing of an Assamese identity as antagonistic to a Bengali Muslim one occurred in a period that witnessed a significant upheaval of the Assamese political economy (Misra 2014). The carving away of East Bengal into a separate nation resulted in the formation of a borderland that cut off major trade routes and access to markets not just in East Pakistan but to other parts of India as well. A general opinion of political, economic, and developmental neglect from the

central government in Delhi fueled a sense of isolation that in turn engendered separatist tendencies that remained rooted in language and culture.

The Assamese identity did not however rest evenly on the Assam landscape. While the non-*tribal* middle class and elites of Assam had fared relatively well, both politically and economically in pre-independence days, the situation had been quite different for *tribal* groups. The Bodos of the Duars accrued scant benefits with regard to educational, economic, and developmental indicators. The emerging Assamese non-*tribal* intelligentsia, while espousing a "polyethnic nature of the Assamese society" (Misra 1999, 1265), viewed *tribal* communities as primitives and savages. The latter were denied access to meaningful political power, looked down upon and treated as untouchables even as they lent their political support to the political aspirations of the Assamese elites.

> ***Journalist respondent #2 (Bodo):*** *"Earlier, what we call the Bodos were known as the Mech. The other so-called Brahmi and the upper classes they used to treat them as untouchables. Like, my father's eldest brother used to say that when they used to go to some restaurant and would drink water, they used to be asked to clean the glass that they used. And that uncle was a graduate of the Presidency College in Kolkata in the 1940s…"*

The Bodo community's awareness and concern pertaining to extant inequities was widespread and was expressed in a Memorandum submitted to the 'Indian Statutory

Commission of 1930' by the *Assam Bodo Jubok Sanmiloni* (Assam Bodo Youth Association). This document simultaneously demonstrated cognizance of ongoing injustices and inequities, as well as expressed an identity of separateness from the general Assamese populace (Khakhlari 1928, 2)

> *"Numerically the Kacharis are a strong community, but want of education the bone of human progress has relegeted them to a minor position. Socially they are regarded as untouchable. To call them Hindus will as a misname in as much the Hindus do not receive them into their society, do not dine with them and are mostly unsympathetic with their ideals and aspirations…. The community as has been alluded to above, does not bind itself to the chariot wheels of the big Hindu community but prefers to take its stand alone and independent of them and earnestly hopes that the Commission would be pleased to class them under a separate heading altogether."*

The historian, Jayeeta Sharma in her book, *Empire's Garden* (Sharma 2011) describes the different influences that have shaped the different facets of the current Bodo identity. In the early twentieth century, a new generation of young, educated Koch/Bodo groups provided the impetus for a social movement and religious change. Formal associations to promote education amongst the poor, discourage certain practices such as animal sacrifice, consumption of pork and alcohol were established. Religious

practices were also modified; caste stratifications were rejected, Hindu scriptures reinterpreted, and new narratives about origin and identity emerged, and support from the Assamese were maintained. Methods of social change were also diverse; some groups converted to Christianity, while others opted to be a part of the elite group, "Brahma" spearheaded by a Bodo leader, Kalicharan Mech who adopted Brahma as a surname in reverence to the Hindu deity. Influenced by Kalicharan, older, derisive last names were discarded, and many Bodos assumed the name Brahma and followed his directives by adopting monotheism and certain Hindu practices, while rejecting Brahminical superiority. The new Brahma religion provided them not only with some social mobility that mainstream Hinduism did not, but also a new, separate, and unique Bodo identity.

2.4.3.4 The Formation of a Self-realized Ethno-regional Identity

The religious and cultural movement initiated by Kalicharan Brahma was a critical moment in the development of a self-realized ethno-regional identity, and is widely recognized as precipitating a specific 'Bodo' identity that separated itself from a broader "Bodo' one. In his memorandum (Ahmed 1929) to the Indian Statutory (or Simon) Commission of 1930, he used the term "Bodo" when referring to his community, in stark contrast a similar document submitted by the *Assam Bodo Jubok Sanmiloni* (Khakhlari 1928). The Bodo identity took a stronghold within the section of the Bodo community that considered itself Bodo from a linguistic standpoint. Though many Bodo-Bodos adopted the practice of Brahma instead of assimilating into a lower caste category

of mainstream Hinduism, even those that did not do so came to identify themselves explicitly as Bodo.

It was only after India gained independence from colonial rule in 1947 that the category of being '*tribal*' was further formalized and crystallized. The colonial "protective discrimination regime" and its associated "incremental policy-making" carried over into the governance system of independent India (Baruah 2003, 45). In 1949, the ST category was enshrined in the Constitution of India via Article 366(25), and Article 342 gave power to the President (in consultation with the relevant Governor) to delineate particular groups as being *tribal*, as well as authority to the Parliament to modify the aforesaid list (Ministry of Law and Justice 2007a). Subsequently, the President issued lists specifying communities that could avail of the status of STs. The Sixth Schedule of the Indian Constitution [comprising Articles 244(2) and 275(1)] of 1950 detailed the provisions relating to the administration of *tribal* areas in northeast India (Ministry of Law and Justice 2007b). It retained the essence of the final colonial Constitution specified in the Government of India Act of 1935, which defined "*tribal* areas" as "areas along the frontiers of India…which are not part of British India or of Burma or of any Indian State or of any foreign State" and positioned such areas as falling outside of the purview of legislature applicable to the rest of colonial India (The National Archives (UK) 2010, 199).

The postcolonial constitution (via the Sixth Schedule) continued an overall British policy of viewing only the so-called *hill tribes* as deserving of special, protective status. Ironically, this was a volte-face of colonial policy in the northeast. Mid-

nineteenth century administrative boundaries in the region, in the form of a so-called "Inner Line" were established with the intent of spatially restricting the activities of *tribal* communities residing in various mountain-ranges surrounding the Assam valley (or the plains) on all sides. The ideology and discourse associated with such administrative policy is explicitly demonstrated in the words of the British administrator Alexander Mackenzie

> *"We found the Assamese Valley surrounded north, east, and south by numerous savage and warlike tribes whom the decaying authority of the Assam dynasty had failed of late years to control, and whom the disturbed condition of the province had incited to encroachment. Many of them advanced claims to rights more or less definite over lands lying in the plains; others claimed tributary payments from the villages below their hills…" (Mackenzie 1884, 7)*

In the words of Vijendra Singh Jafa, an ex-senior administrator in Assam,

> *"The Inner Line was first defined in 1873 to stop hill tribal raids into the plains. However, within a few years of the British occupation of these hills, restrictions ceased on the movement of hill tribes, and they were allowed to fish, hunt and attend markets freely on both sides of the Line. But the plainsmen were never allowed to enter the hills without a pass. The hill tribals, whose activities had*

prompted the creation of the Inner Line Regulation, were thus exempted from the application of its provisions. And, ironically, the restrictions applied from now on only to the people of the neighboring plains districts of Bengal and Assam for whose protection the Line was initially defined. In the long run, therefore, the Inner Line was neither designed nor enforced to serve its original purpose." (Jafa 1999)

The notion of an Inner Line providing spatial and socio-cultural exclusivity to select STs was extended by the Sixth Schedule, but left out so-called plains tribes, such as the Bodos. The political boundaries thus drawn, were externally generated, were as powerful as preceding colonial demarcations, and created conceptual polities that were considered "somehow essentially homogeneous and self-contained" (van Schendel 2002, 648). While giving hills tribes a strong "layer of protection against potential settlers" (Baruah 2003, 45) from other ethnic groups, *tribal* or otherwise, the plains tribes were left feeling that they had been afforded the same kind of territorial fortification, and their lands were open to settlement by those they considered as 'outsiders' or 'foreigners'.

From a political standpoint, the Bodo identity continued to be part of a broader Bodo *tribal* movement that resulted in the formation of a *Plain Tribals Council of Assam* (PTCA) in 1967 (Goswami 2014). The PTCA demanded a division of Assam, utilizing the Brahmaputra river as the basis for the carving out of a separate state they named *Udayachal* which would comprise the entire area of Assam north of the river (Dash

1989). In doing so they associated a specific geographic area to an identity historically steeped in a process of reclaiming a lost and glorious ethnic identity.

A key development in the overall socio-political 'Plain *Tribal*s' (as distinct from several 'Hill *Tribal*' communities) movement was the almost simultaneous formation of another important political entity – the All Bodo Students Union (hereafter, ABSU). The PTCA and ABSU jointly spearheaded the movement for the establishment of *Udayachal*. Though the PTCA comprised nine plain tribes (including the Bodos), the Bodos were at the helm of affairs with the ABSU and the *Bodo Sahitya Sabha* (Bodo Literary Association) steering the course of the movement till the late 1980s. It is noteworthy that the Bodos brought the issue of language to the forefront and made it one of the central pillars of the *Udayachal* movement (Goswami 2014). In doing so, they adopted the same strategy that had contributed to the rise of the Assamese nationalist movement of foregrounding a linguistic identity, and that, ironically, had subsequently led to the disenchantment of other *tribal* groups with the Assam movement and its non-*tribal* Assamese elite.

By the late 1980s the PTCA had become a relatively powerless entity and the ABSU had gained control of the movement through violent means that even included killings of PTCA leaders and supporters (Misra 1989).

> ***Academic respondent #1 (Bodo):*** *"In the beginning, there has been lots of division between the PTCA and the ABSU because the latter were the younger lot. Some of the leaders of the PTCA tried to object saying that*

why should a student body come into the political arena, and did not want ABSU to start a movement. So, there have been a lot of claims by supporters of both the PTCA and the ABSU. Lot of people died…adjacent villages fought each other in the event that they were supporters of different groups. The members of one village could not venture near the other, there were boycotts against each other. Permission for marriage was not granted with members of other villages. I think I was in school at the time and it was horrible."

This seismic shift was ushered in with the charismatic Upendranath Brahma (or UN Brahma) assuming the role of ABSU president in 1986. Under the UN Brahma's leadership, the ABSU launched a renewed campaign for a separate state. The notion of *Udayachal* was dropped and instead the demand became one for a separate *Bodoland*. It is worth pointing out that the 1980s ABSU leadership had lent support to a similar and larger movement led by the All Assam Students Union (AASU) from 1979 to 1985. The AASU's agitation was predicated specifically on the perceived notion of past and continuing unlawful occupation of land within Assam by illegal immigrants from Bangladesh, specifically since the latter's attaining the status of an independent nation in 1971 (Misra 2014). This political fear of the *Bangladeshi* was centered around the twin concerns that were demographic in the sense of becoming a minority within their own land, as well as cultural, in that they feared an East Bengali/Bangladeshi swamping of what was viewed as *Axomiya* (Assamese) culture. The AASU's demands were

recognized by the Indian government with the signing of the Assam Accord in 1985. The AASU was subsequently dissolved and its top leaders formed the Asom Gana Parishad (AGP) political party which gained administrative and political control of the state by winning the State Assembly elections in 1985 with a significant majority.

It was not long after the signing of the Assam Accord and the political ascendancy of AGP that *tribal* communities and their political leaders began to question the wisdom of their support for the AASU. A respondent described a conversation with UN Brahma in which the latter talked about being sidelined by the AGP leadership thus

> ***Academic respondent #4****: "You know I am really ashamed that I don't speak Bodo. I wish I did and I wanted to thank you for giving your time in this situation."*
>
> ***UN Brahma****: "If there was one Assamese who spoke like you…one…one more, we wouldn't be where we are today. But I'll tell you what happened. After the movement was over and we supported AASU and they were there for the swearing in and all that, and then I asked for a meeting with my friends Bhrigu Phukan and Prafulla Mahanta (AASU leaders). I was kept waiting for five hours. At that point I decided that they were no different to any other caste Hindu Assamese. They'll treat me like dirt and I will make them suffer. That's when we decided to fight them."*

Academic respondent #4*: "Really sorry I don't speak Bodo. I should know more Bodo but I don't know."*

UN Brahma*: "One more like you would have changed things."*

Similarly, during the course of a press conference, UN Brahma had this to say on the relationship between the Bodoland Movement and the AASU-led Assam agitation (Owary 2015):

"We did not participate in the Assam agitation. However, we gave some moral support as regards to the foreigners issue. We supported the cause but we did not participate in the movement, because we knew that the idea of the Assam movement was to grow these Assamese communities, to impose their Assamese language and culture upon the non-Assamese people, upon the Bengalis, upon the minorities. And that is what they are doing now. When the AGP came into power, they imposed Assamese language as the sole official language."

The fear of the 'foreigner' or 'illegal outsider as usurper of one's land' was amplified in the case of *tribal* communities. The postcolonial government through the Assam Land and Revenue Regulation (Amendment) Act of 1947 had empowered any given provincial government to

"adopt such measures as it deems fit for the protection of those classes who on account of their primitive condition and lack of education or material advantages are incapable of looking after their welfare in so far

as such welfare depends upon their having sufficient land for their maintenance."

Thus, the postcolonial state continued colonial practices of stereotyping *tribal* groups as needful of State support and protection due to an inherent incapability of surviving without such measures. Crucially, the legislation called for protection of land, including the "constitution of compact areas" where *tribal*s were a majority as "belts or blocks" (BoBs) with the aim of ensuring that they had "sufficient land for their maintenance". Finally, in an act of true administrative ambiguity, it delineated BoBs boundaries as coinciding with "mauza boundaries or be otherwise easily distinguishable"; mauzas are administrative units established for the purpose of revenue collection. In this manner, the colonial practice of territorially fixing culturally complex groupings to distinct parcels of land through a largely administrative logic, continued well after the demise of the system that promulgated it. *Tribal* communities accordingly continued to derive their sense of identity through such standardizing constructions of the postcolonial State.

The ABSU movement under UN Brahma took up the issue of land alienation as a pivotal political issue. Claiming that land-grabs of *tribal* BoBs had continued since independence and had accelerated through unchecked illegal occupation by foreigners, the *Bodoland* movement under the leadership of UN Brahma, took a more intense and ultimately violent turn. Like the colonial state, postcolonial administrations too were relatively lax in enforcing the laws such as the 1947 Act, primarily due to existing

political and economic realities, e.g. an ever-present demand for immigrant labor (Baruah 2005). Contrary to the ABSU's claim of restricting itself to nonviolent methods of political action, the organization's history suggests otherwise. Its militant wing, the Bodo Volunteer Force (BVF) was involved in a string of violent incidents designed to make political statements and garner both public and media attention (Goswami 2014). By the early 1990s, the BVF would morph into the Bodo Liberation Tigers Force (BLTF), one of the two major Bodo militant groups. The other such group, the National Democratic Front of Bodoland (NDFB) also emanated from ABSU when some members broke away from their parent organization in 1986. Unlike the BLTF which was ostensibly fighting for a separate state within the provisions of the Indian constitution, the NDFB explicitly demanded Bodo nationhood.

2.4.3.5 The Emergence of a Militant Insurgency

A temporary lull in the movement endured with the passing of the Bodoland Autonomous Council Act of 1993 (Upsala Conflict Data Program 1993). It attempted to provide a level of autonomy by attempting to demarcate land area (villages) where Bodos were in a demographic majority as well as the establishment of a semi-autonomous governing body, the *Bodoland Autonomous Council* (BAC). As part of this Act, the BVF was disbanded and the ABSU president, S.K. Bwismuthiary assumed leadership of the BAC. However, within less than a year of the promulgation of the Act, instability arose through disagreements between BAC leaders, as well as dissatisfaction with both territorial limits and the extent of the autonomy. A number of villages had not

been included within the purview of the BAC because the Bodos did not have demographic majority in them.

By 1996, the ABSU had officially disassociated itself from the BAC agreement and commenced to demand a separate state of *Bodoland*. The disbanded BVF arose again in the form of a new incarnation, the militant *Bodo Liberation Tigers Force* (BLTF) and then commenced a period of violence, terrorism, and ethnic clashes. The BLTF and NDFB have been implicated in the use of coercive means to drive non-Bodos communities from different parts of northern Assam in an attempt to establish a Bodo majority population. Such incidents led to inter-ethnic clashes, the vast majority occurring between Bodos and Bengali Muslims (henceforth *Muslims*) with fewer though significant incidents between Bodos and Adivasis (Goswami 2006). The Adivasi community includes a number of ethnic groups that were coercively brought in by the colonial regime into Assam to provide cheap labor, frequently in slave-like conditions, for the tea and timber economies in Assam (Sharma 2011; Behal 2014). The late 1990s and the early 2000s were a particularly volatile time for the Bodoland movement. Both the BLTF and the NDFB were reportedly involved in kidnappings, extortion, as well as killings. Both militant groups also targeted each other through outright murders of members of the opposing organization as well as their supporters (Goswami 2014).

Many political analysts of Assam have written about the role of the Central Government in providing support to the BLTF in an effort to prop it up as a thorn-in-the-side to the regional political party, the Assam Gana Parishad in power in Assam from 1996-2001. The role of the Research and Analysis Wing (RAW; India's CIA) has been

implicated in the training of BLTF cadres (Baruah 2010). Such allegations are part of a long, clandestine history of the Indian State's role in fomenting instability in regional political systems. A respondent mentioned that there were almost no incidents of skirmishes between the BLTF and security forces primarily because members of this militant group were trained by the latter. The late 1990s also saw a number of skirmishes between the BLTF and the NDFB that resulted in killings of members and supporters of the rival group. However, in 1999 the BLTF agreed to a ceasefire and began a process of negotiations with the Assam and Central governments that resulted in what is informally known as the *Bodo Accord* (2003).

The signing of the *Bodo Accord* was followed by the re-emergence of the BLTF as a legitimate political party, the *Bodo People's Front* (BPF). Through an Amendment to the Indian constitution and a tripartite agreement between the BPF, Assam government, and the central government, the semi-autonomous *Bodoland Territorial Council* (BTC) was formed with broad-ranging legislative, administrative, executive and financial powers. Four districts (Baksa, Chirang, Kokrajhar and Udalguri) were coalesced into the *Bodoland Territorial Area District* (BTAD), an administrative unit to be governed by the BTC. Though not officially part of this process, the ABSU proclaimed its intention to closely monitor the workings of the BTC and to hold it accountable. The NDFB viewed the Accord and the formation of the BTC as an exercise in futility and as the surrendering of the struggle for a Bodoland.

2.4.3.6 An Uneasy Peace and a Partial Autonomy

In the approximately 12 years since its inception, the BTC has been plagued by allegations of ineffectiveness due to the lack of requisite power and autonomy to accomplish key developmental goals. For example, a piece of conventional wisdom encountered frequently during the course of this research is that the Assam state government, while being party to the *Bodo Accord* and the resultant devolution of administrative powers to the BTC, has in reality been reluctant at best to do so in practice. For instance, 'administration of justice' and 'control of money-lending and trading by non-*tribal*s' have not been extended to the BTC. Also, even with regard to departments over which the BTC has administrative authority, respondents reported Assam government practices as being overly controlling or obstructionist, thus hampering meaningful development initiatives by the former. Despite such obstacles, most respondents acknowledged and praised the strides the BTC has made with regard to transport infrastructure development.

> ***Journalist respondent #2:*** *"The advantage is that they have been developed infrastructure-wise. Roads are coming up…earlier there used to be lots of problems but now most of the areas have motor access and other infrastructure is coming up as well. Educational institutions have come up like an institute of technology, an engineering college and a university has come up. You can say that it's a big achievement."*

On the flip side, the BTC was frequently accused of systemic corruption and cronyism. The sprawling private bungalows of BPF politicians dot the Kokrajhar landscape as concrete evidence of incomes that cannot be justified by legal salaries. Accounts of preferential dole-outs of infrastructural contracts and significant kick-backs from the same were frequently collected during the course of this work. In particular, erstwhile BLTF members were reported as being recipients of such largesse from colleagues who had become influential politicians. Respondents lamented the impact of such practices on the quality of the outcomes, such as roads that would become riddled with pot-holes after a few heavy rain-showers, due to the use of sub-standard materials by contractors to cover for payouts to local political elites.

> ***ABSU respondent #2****: "Since the formation of the BTC, there has only been infrastructural development. As for education, there has been very little. In the medical arena, infrastructure has come up…in all areas there are hospital buildings, but no doctors or nurses. The BTC is constructing hospitals worth INR 100 crores* (1 crore = 10 million) *through the agreement (Bodo Accord). The civil hospital that has recently been declared…in the agreement there is INR 100 crores for a super-specialty hospital. The building is such that even the Guwahati (Assam's largest city) Medical College can't compete with it. The construction is complete, all the machinery has arrived but there are no doctors to run it, no mechanism to put it into motion."*

With an emphasis on *identity* (the Bodos) firmly situated in *indigeneity* (Bodos as original inhabitants) and politically driven by a *linguistic* (adoption of Bodo as lingua franca) focus, the Bodoland movement neatly mirrors its idol and precipitator – the Assam movement. Like its predecessor, the Bodoland movement too has generated feelings of marginalization among non-Bodo communities residing in the BTAD. Widespread opinions that the Bodo Accord had largely benefitted only the Bodos were documented as part of this research. This has led to socio-cultural and political mobilization among various non-Bodo groups, as well as a coalescing of their efforts to counter the perceived socio-political dominance of the Bodos. The membership of the BTC reflects the Bodo domination of the political machinery of Bodoland. The Council has three categories of elected membership totaling 40 seats – i) *ST* (30 seats; reserved for *tribal* communities), ii) *Non-ST* (Five seats; reserved for non-*tribal* communities), and iii) *Open* (Five seats; for all communities). Twenty seven of the 30 *ST* seats (90%) are occupied by Bodo members. Whereas all the remaining elected slots are held by non-Bodo members, three (of five) *Non ST* and two (of five) *Open* members of the Council are part of the BPF (Bodoland Territorial Council 2016).

2.4.3.7 Continuing Identity Clashes and the Politics of Land Tenure

The two communities with which the Bodos have had recent and significant conflict are the Adivasis and the Muslims. Both conflicts are rooted in two key factors driving the Bodoland movement – a *tribal identity* and *control over land*. In yet another similarity between the Bodoland and Assam movements, Bodos overwhelmingly view Muslims as illegal occupiers of *tribal* land at best and dangerous foreigners at worst.

Muslims settled the BTAD and other parts of western Assam since the early 20th century through various initiatives of the colonial and post-independence State. The Bodos have historically contested the legality of such initiatives. In addition to accusations of unlawful appropriation of *tribal* land, Bodo respondents frequently characterized the Muslim community as demographically overwhelming Bodos and other communities within Bodoland as a direct result of high population growth rates. This is particularly noteworthy given that the assigning of villages to the BTAD was conducted on the basis of whether Bodos held a demographic majority or not. However, Bodos have also voluntarily sold their land to Muslims through informal transactions, since many Bodos have traditionally not held formal titles to their lands. In the words of an academic respondent (#3):

> *"So that is when the relationship between the local inhabitants and the East Bengal migrants become very clear because what you discover is that for the…in the 1930s that for the last 30 years or so which is basically from the first wave of migration, from 1901 thereon, people have been selling their land to migrants at a very cheap price, at a very low rate because this is land that they were anyway…I mean that is the thing, it is see, how land is being perceived. It was not a commodity to be sold you know, so you do not have that attachment a) because you are not a peasant cultivators of the same kind, but you always, I suppose, presumed that you could come back to land that there'd always be land available."*

The above statement highlighted a key distinction between the tribal and non-tribal farmer about relationship with land. The latter, especially Muslim migrant farmers were fully integrated with a system of land ownership that understood land as a commodity. The same respondent described the difference between pre-colonial and colonial systems of generating land revenue as:

> *"…revenue was collected on the basis of the crops grown, the areas of crops, so even if you grew on 50% of your land and you didn't on the rest 50%, you'd be taxed for the 50% on which you grew your land, on which you grew the crop. And that absolutely shifts…I mean it changes in the colonial period where you're taxed on the land. So even if you've had a bad year, even if there has been bad rains, no rains…"*

The colonial system did not, for example, account for the fact that "in the earlier half of the nineteenth century, the prices of agricultural produce were, on the whole quiescent", and that "while prices were low in this period, it was also one of massive increases in the land revenue
extracted from areas newly conquered by the Company (*colonial administration*), the enormous
addition to the real burden of the agricultural producer becomes evident" (Siddiqi 1981, 255).

Since the militant turn of the Bodoland movement in the late 1980s, a number of incidents involving armed assaults of Muslim villages have occurred in various parts of the BTAD. Such episodes frequently led to the latter fleeing their villages and subsequently residing in what are known as *relief camps*. These camps receive scant support by the government machinery and residents survive in squalid conditions with acute shortages of various critical resources (e.g. potable water) and infrastructure (e.g. sanitation, power). Bodo-on-Muslim violence (or the very real perception of it) has resulted in both an overall exodus of Muslims from rural parts to the southern margins of the BTAD and to the proximity of urban areas. Villages and agricultural land vacated by fleeing Muslims have in many cases subsequently been occupied by Bodos. While enabling Bodos to gain control over land they believe to be theirs, Muslim emigration is a direct loss of cheap labor for Bodo farmers. The increasing disinterest of the new generation of Bodos in agriculture further compounds this problem.

The so-called Adivasis of Assam present a particularly interesting case in that they were brought into the present-day state at the turn of the nineteenth century, largely as indentured labor tea and timber production. They were forced to work under brutal, exploitative, slave-like conditions in tea-gardens to supply a booming colonial tea economy (Behal 2006). Additionally, Adivasis were also brought into western Assam to provide labor for timber extraction from RFs, and were settled in 'forest villages' along the fringes of RFs (Gohain 2007). The areas that formed the source of such directed migration are the current states of "Jharkhand, Chhattisgarh, Orissa, West Bengal and Andhra Pradesh" (Misra 2007b, 11).

The term ‘Adivasi’ literally translates as ‘original inhabitant’ and is thus closest to the contemporary term ‘indigenous’. It also encompasses a diversity of ethnic groups that have current ST designations across India. However, the Assamese descendants of these groups whose ancestors were coercively relocated to Assam in the colonial era, do not hold ST status but have been agitating for it since the turn of the century. In November 2007, an Adivasi demonstration for the same on the streets of Guwahati turned violent with many Adivasis being assaulted, a few fatally so, and a young Adivasi woman being stripped naked in public view (Bhaumik 2007). The groups that view themselves as the legitimate *tribal*s of Assam, e.g. the Bodos, are opposed to the conferring of ST status on the Adivasis, while acknowledging that the latter’s socio-cultural fabric, land use ecology, and economic status fits with the official defining characteristics of being *tribal*.

The Indian Ministry of *Tribal* Affairs lists the following characteristics as “criteria followed for specification of a community” as a ST: primitive traits, geographical isolation, distinct culture, shyness of contact with the community at large, and backwardness (Government of India 2017b, 38). Bodo descriptions of Adivasi socio-cultural mores and livelihood practices tended to match official understandings and descriptions of *tribal*s and *tribal*ness. A Bodo respondent (Bodo respondent #8) was remarkably candid when asked about how his community viewed Adivasis:

> *“As for Adivasis, we Bodos think of them as being stupid folk (“buddhu jaisa aadmi”). They use bows and arrows to hunt, their lifestyle is sort of uncivilized.*

So, we Bodo folk tend to look down upon them because they are not a developed community. Based on my own experiences with the Adivasis, I find them to be a very straight-talking folk who speak in a very down-to-earth way, and I think that despite the advent of civilization, they have not changed their ways."

A journalist respondent's (#1) statement echoed the previous comment:

"Even now you can barely find even motorcycles in Adivasi villages, which is something that has become quite common in Bodo villages, where every other house has a motorcycle, even cars. Furthermore, Adivasis don't use bricks for their construction and still largely make their houses from mud. These houses are architecturally very nice and it's a tradition among them. They don't want to make buildings and just want to live life on their own terms."

Bodo discourse also reflected a complex, conflicted relationship between the two ethnic groups. A Bodo respondent's (#2) statements provide an example of the inherent nuance. He began by saying that:

"Non-tribals such as Adivasis…are going to continue to live in this area, and they are entitled to land…since they are forest dwellers and thus they will be bonafide forest residents"

Later in the interview he exhibited a discursive shift with regard to Adivasi *tribal*ness:

> *"We include Adivasis within the label of 'tribal'. Adivasis have permission to reside in these belts and blocks (areas designated for exclusive tribal occupancy)...they are recognized as traditional forest dwellers and so we have no problem with them."*

The same respondent, however, pointedly criticized Adivasi attempts to gain ST status within Assam in a statement to a journalist, interestingly claiming that the latter was an example of a community that had made significant strides economically and with regard to literacy, and hence was not deserving of the affirmative action enabled by the ST status.

The forests of the BTAD have historically been a rich source of timber and Adivasi laborers were settled along the margins of reserved forest areas with limited land use rights. Through a combination of demographic change as well as informal land transfers, Adivasi populations in the BTAD have made incursions (considered illegal by the FD) into reserved forest areas. This has brought them into direct conflict with Bodos whose shifting patterns of land use are very similar. The first incident of violent conflict between the Adivasis and the Bodos occurred in 1996 and soured a hitherto relatively peaceful relationship between the two communities and provided the impetus for the rise

of Adivasi militant groups. Unlike Muslims, Adivasis tend to stay in close proximity to forested landscapes and away from urban areas.

2.5 DISCUSSION AND CONCLUSION

In his book titled 'The art of not being governed', anthropologist James Scott (2009) attempts to provide a grand explanation for a spatial pattern that he observes over a vast area that he labels 'Zomia' of which northeast India forms the western limit. He socio-culturally and politically describes this pattern as a "cleavage that shapes much of the region's history" and geographically positions it as a separation between "between hill peoples and valley peoples" (2), with the former being "self-governing" and the latter being governed by a "state" apparatus. In doing so, he highlights associated dichotomies of "the hill/forest people and the valley/cleared-land people…the barbarian and the civilized, the backward and the modern, the free and the bound, the people without history, and the people with history" (3). Scott's novel proposition regarding denizens of the hills of Zomia is that

> *"Most, if not all, the characteristics that appear to stigmatize hill peoples-their location at the margins, their physical mobility, their swidden agriculture, their flexible social structure, their religious heterodoxy, their egalitarianism, and even the nonliterate, oral cultures-far from being the mark of primitives left behind by civilization, are better seen on a long view as adaptations designed to evade both state capture and state formation. They are, in other words, political*

adaptations of nonstate peoples to a world of states that are, at once, attractive and threatening." (9)

Arguing against the dominant narrative of primitivism of hill people frequently stated or implied in terminology such as '*tribal*' or 'indigenous', he instead describes their supposed backwardness as a calculated and deliberate strategy to evade the lowland state, hence characterizing it as "barbarism by design" (8).

The Bodos of Assam are classified as a 'plains tribe' whose culture, economy, and politics are believed to be rooted in the vast, relatively flat Brahmaputra valley, specifically within its western edge. A geographic stronghold of the Bodos since precolonial times was the Duars, located in western Assam in the vast district of Goalpara, and bordering the foothills of the mountainous kingdom of Bhutan. In contrast to key aspects of Scott's Zomia hypothesis, pre- and early colonial Duars was an area of shared sovereignty, with the Bhutan monarch exerting considerable influence over its political economy (Misra 2005). The markets of the Duars and Goalpara were important loci for trade that included not just the hills and mountains of Bhutan to the north, but also the Garo Hills to the south. The Garos (currently classified as a hill tribe) were, and continue to be, inhabitants of the hills as well as the Duar plains. Tributes, aggressive raids, and systems of taxation, were all part of a complex, shifting political economy that included a mountain monarchy, hill polities, as well as plains landlords and chieftains, and did not conform to the ultimately simplistic model of Zomia. It was driven by the "specificities of the place and the people", rather than as "negations or effects of the

strategy to evade the state" (Karlsson 2013, 327). Ironically, it was the normalizing administrative gaze and associated policies of British colonial powers that created the valley-hill dichotomy in northeast India and subsequently utilized it to carve both fluid space and interactive ethnic entities to further their overall agenda. In the words of anthropologist, Jelle Wouters, "the plains provided too essential a resource for those living in the relatively 'barren' hills to ignore" (2012, 43).

Andre Betielle found little evidence to support the core assumptions of the colonial State with regard to the *tribal* slot (Béteille 1986). He problematizes the entire concept of *tribal* conduct as proffered by the colonial and postcolonial States and thus suggests that so-called *tribal* communities exhibit the kind of social, political, and economic flexibility that one might expect from any group. Prior to India's independence, the Bodos attempted a range of strategies to achieve their social and political objectives through either unifying Assam's plains tribes and forging a common identity of Tibeto-Mongolian origin, or through aligning with pan-Indian organizations for marginalized communities. However, because of economic and educational drawbacks, and political marginalization it was not until the late 1980s when through a militant struggle the Bodos found a prominent influential voice. Such discursive construction has since informed administrative policy in myriad ways that have had a diversity of social, political, and material outcomes. The controversies generated around the term indicates political capital, and the *tribal* communities, like the Bodos have adopted the State's essentialisms to further their own strategies (Sundberg 2006).

Cultural and religious assimilation and differentiation and linguistic similarities and differences have shaped, altered, engendered, and contested the identities of place and people of many communities in Assam. The demand for a separate state on these bases of such similarities and differences begs the question of who exactly are the Bodos, especially since there is controversy regarding which peoples should or should not be considered as belonging to the larger Bodo community. Religion, caste, notions of 'primitive' and 'civilized', and social status combine to form an intricate dynamic that drives the adoption and rejection of identities and names. The ABSU, which has been the most powerful organization demanding a separate state, includes groups who communicate or hitherto communicated in Bodo, as well as in languages or dialects acknowledged by linguists to belong to the Bodo family of languages.

Furthermore, the ABSU also identify the Koch and Sarania communities, who have adopted Hinduism and currently refer to themselves as Assamese, as Bodo, but not the Rajbanshis who now do not speak the Bodo language (Baruah 1999). Evidence suggests that the presence of Bodo language and culture were widespread and in fact many who currently identify as Assamese could indeed have been previously members of a related system of communities. Prejudices based on notions of the "primitive *tribal*" however have led to the rejection of Bodo identity in an effort towards social mobility (Prabhakar 1974). Despite widespread disagreements about a uniform Bodo ethnicity, a number of ethnic groups are assumed to be part of the larger Bodo identity.

Bodo militant groups have been implicated in inter-ethnic conflict by the news media, academia, civil society, and the domain of public opinion. From a big-picture

perspective, Bodo militancy has been a significant factor in the politics of the Bodoland movement. In addition to precipitating inter-ethnic conflict, it has mediated both patterns of land use and land cover change, contributed to the establishment of Bodo political dominance among the tribes of western Assam, and has been a principal driving force of an informal economy of illicit timber extraction from the Manas landscape. Currently active Bodo militant groups don't seem to have any mandate that sets them apart from non-militant Bodo government and civil society groups. Hence, their activities can be viewed primarily as an *immoral economy* centered on kidnappings and extortions from both formal (e.g. road construction) and informal (e.g. illicit logging) enterprise. It occurs in a landscape virtually devoid of developmental infrastructure and a severe paucity of sustainable livelihood opportunities apart from agricultural production.

Conventional characterizations of Bodo militancy simply in terms of *security* and *tribal savagery* stem from a gross absence of appropriate context and the persistence of particular stereotypes pertaining to *tribal* people. The vast majority of writings of security experts on the Bodo militancy/insurgency is devoid of historical, political, economic, and socio-cultural context and tends to focus disproportionately on the spectacle (kidnappings, murders) rather than key drivers (lack of development, socio-cultural marginalization). The role of the Assam government in contributing to the militant shift of the Bodoland movement in the 1980s through its heavy-handed approach to an initially largely peaceful, democratic process and the covert role of the central government in supporting the BLTF to further political ends are inadequately acknowledged. Concomitantly, the tendencies of various Bodo entities to downplay

excesses of the militancy are equally problematic though comprehensible in terms of political, economic, and socio-cultural gains that have accrued to the Bodo community, though disproportionately to its "dominant elite" (Barbora 2015, 299).

In conclusion, the self-realized, ethno-regional identity of the Bodos of themselves as a *tribal* people is a "positioning" that has drawn upon their own "historically sedimented practices" [e.g. shifting cultivation, timber extraction], "landscapes" [Manas], "repertoires of meaning" [forest dwellers, marginalized autochthons], and has emerged "through particular patterns of engagement and struggle" [the Bodoland Movement] (Li 2000, 151). It is simultaneously internally (self-identification as *indigenous*) and externally (description and classification by colonial and postcolonial States) generated. It came into being through interactions with a normalizing State machinery that attempted to standardize a complex pre-colonial socio-political and economic landscape with the aim of making it more legible and amenable to its own administrative imperatives. The subsequent interaction of the Bodos with the rationality of colonial and postcolonial States was not a straightforward one, mainly due to the fact that the diverse objectives of successive governments were "often in tension with one another and sometimes contradictory" (Li 2010, 386). Throughout the process of development of a tribal identity, the Bodos have demonstrated agency in opportunistically (often simultaneously) accepting and discarding the classificatory tropes of the State. In recent times, they have utilized the standardizing practices of the State to generate essentialisms regarding other ethnic groups, for example, to challenge the *tribal*ness (Adivasis) or the citizenship (Muslims) of the *other*.

CHAPTER III

ENCROACHMENT, ILLICIT RESOURCE EXTRACTION, AND LIVELIHOOD PRODUCTION IN THE MANAS TIGER RESERVE

3.1 INTRODUCTION

Transformation of land cover is increasingly perceived as a major threat to the future of the world's terrestrial biodiversity. This is particularly relevant to the tropics where deforestation, fragmentation, and resulting degradation are viewed as key processes impacting the sustainability of tropical forest ecosystems and the diversity of species associated with them (Rands et al. 2010). The preeminent system of attempting to control and manage such impacts in the past century has been through the setting up of 'protected areas' (PAs), which are areas that "receive protection because of their recognized natural, ecological and/or cultural values" (Wikipedia 2017). Since the 1980s, the worldwide extent of terrestrial PAs has increased from approximately 3.48% to 12% (roughly 17.1 million sq. km.) of global land area facilitated by the belief that they are the backbone of biodiversity conservation (Jenkins and Joppa 2009). However, recent research has posed challenges to such confidence in their effectiveness. A global survey of PAs has shown that almost half of those surveyed exhibited "major deficiencies" in management, particularly with regard to involvement of local communities and programs intended to benefit native people (Leverington et al. 2010).

Most influential conservation biologists and protected area managers (predominantly of European or American origin) seem to have worked with the

underlying assumption that the main problem facing biodiversity were local people themselves and that the best way to protect and conserve the former would be to fence it off from the latter (Adams and McShane 1996). Furthermore, such land management is philosophically dependent on an ecological imaginary that relies overwhelmingly on western science, privileges a technocratic mode of governance, and promulgates an environmental discourse that characterizes local communities in particular ways. Ultimately such management produces policies that enhance government control while simultaneously marginalizing indigenous groups, all in the name of restoring ecological equilibrium (Igoe 2004). The outcome of such dynamics has been contentious at best. Local communities have reacted negatively to forced evictions, restrictions, or outright bans on the collection of forest produce and/or hunting, reductions in land area available for agricultural production, as well as the marginalization of the way they comprehend and relate to whatever might be conceived as 'nature' (West and Brockington 2006).

Local households exhibit a variety of practices for livelihood generation that span the range of legal, quasi-legal, and noncompliant with existing laws pertaining to natural resource preservation and management. Such a situation is not restricted to the Indian context as the "reality of resource use and access is often characterized by informal negotiations, illegal extraction, and rule-bending" across the globe (Robbins et al. 2009, 560). However, research on the underlying political, economic, and cultural drivers of noncompliance and resultant conflict in areas of biodiversity conservation is scarce, thus raising questions regarding the sustainability and justice of conservation efforts. 12.5% of the terrestrial zone of the globe is already under a system of 'protected area'

management and with plans to increase the coverage to 17% (Jenkins and Joppa 2009; Watson et al. 2016). Furthermore, biodiversity conservation is increasingly occurring within zones of longstanding human habitation and use, frequently impacting marginal producers (e.g. Roth 2008).

Livelihood generation in and around the MTR occurs in a lively, contentious milieu of biodiversity conservation, state-driven timber production, and agriculture. The forests of Manas function simultaneously as a site for what the Indian Forest Department (IFD) labels as i) inhabitants of *encroachments* who are viewed as illegally occupying forest land, ii) residents of *forest villages* who were settled on forest land to assist with legal timber extraction (under administration of IFD), and iii) occupants of *revenue villages* along the fringes of the Reserve (under administration of the Assam Revenue and Disaster Management Department), as well as iv) the location for a flagship biodiversity conservation initiative – Project Tiger. Local rural and forest residents are primarily engaged in agricultural production as the dominant livelihood strategy, coupled with the collection of a diversity of forest resources, which includes timber and fuelwood extraction. In an area, virtually devoid of major industrial infrastructure, service sector jobs, or other forms of development initiatives, land (and its associated resources) is the key commodity to be possessed, utilized, and traded with. This research attempted to answer the following questions:

1. How are different ethnic groups utilizing land either occupied within or on the fringes of the MTR?

2. What is the outcome of land occupation within RFs for households? Are total landholdings of *encroached* households higher than *non-encroaching* ones?
3. What is the relationship between total landholding and fuelwood collection for commercial sale?
4. What is the relationship between total landholding and timber extraction?

3.2 STUDY SITE

Manas is part of the Indo-Burma 'biodiversity hotspot' (Conservation International 2012) region. It is located between 26°45′ - 26°50′ N latitude and 90°30′ - 91°15′ E longitude. The climate of the reserve is subtropical in nature with an elevation that ranges between 40 – 170m (an average of 85m). The area receives between 3,000 – 4,000 mm of rainfall annually and annual temperatures range between 6 – 37 °C. The core area of the reserve, the Manas National Park, is a UNESCO 'world heritage site'. It was initially established as a 360 km^2 sanctuary in 1928 on what was once the hunting preserve of the royal families of Cooch-Behar and Gauripur (Maharajah of Cooch Behar 1908). In 1973, the MTR was created under the *Project Tiger* initiative, covering 2,840 km^2 in five districts of Assam (Kokrajhar, Bongaigaon, Barpeta, Nalbari, and Darrang) with the National Park (then a wildlife sanctuary) as its core area and a number of RFs as its buffer zone. Manas is home to a number of mammal and bird species classified as *endangered* by the International Union for the Conservation of Nature (IUCN Red List 2017), at least one *critically endangered* mammal (the Pygmy Hog), as well as at least one *critically endangered* bird (the Bengal Florican). This study is confined to three

large RFs located west of the National Park – the Manas, Chirang, and Ripu RFs. These large blocks of forest are located within the Kokrajhar and Chirang districts, which in turn are part of the semi-autonomous Bodoland Territorial Area Districts (BTAD or Bodoland).

3.3 METHODS

This study utilizes data from research conducted between 2013 and 2016 amongst personnel of the IFD, civil society groups, and rural households, living adjacent to the three large Reserved Forest areas that constitute approximately three-quarters of the entire land area of Manas – Ripu RF, Chirang RF, and Manas RF. Formal surveys of 215 agrarian households supplemented by detailed, semi-structured interviews, as well as participant observations were utilized to ascertain the intensity and household-level pattern in current levels of resource use within the Reserve. According to existing laws pertaining to RFs, all extractive activities are officially banned within the Reserve.

Intermittently between August 2013 and March 2015, the author and two field assistants conducted a detailed survey, in Assamese and Hindi, of 215 households to assess patterns of livelihood production and forest resource use within the MTR landscape. Though the primary objective was to interview either the male or female household heads in a comfortable, contemplative setting, family members were frequently present and their input was incorporated into the survey.

The research was conducted in the throes of an active militant insurgency, thus necessitating convenience sampling to cover households in villages spread across the

entire length of the RFs of the MTR. Access to villages was limited due to availability of collaborators who enabled contact with households. Additionally, frequent *bandhs* (an overall socio-economic and infrastructural shutdown precipitated by a political party or community) were a major source of delay or outright cessation of field research. Operations being conducted by security forces, and safety concerns raised by collaborators either because of or under the threat of ethnic conflict, further prevented or significantly hampered fieldwork. Such field conditions necessitated opportunistic collection of data in remote villages, accessible only by motorcycle, and with populations with virtually no established system of phone or other communication. Villages, both within and along the boundary of the Reserve were sampled opportunistically during the establishment of transects to study bird populations within the Manas forests. Since the bird sampling regime was designed to evenly cover the Reserve, the household survey locations adequately captured the landscape of human-use.

A preliminary research effort in the Summer of 2012 that was intended to be three months in duration was cut in half due to widespread, violent ethnic conflict within Bodoland. Accordingly, minor modifications to the structured survey data-form to assess local livelihoods had to be made during the formal research phase. As a result, the responses to a few questions do not contain responses from all 215 households covered as part of this study.

3.3.1 Land Occupation

Occupation of land within the RFs of Manas was documented during household surveys by utilizing key informants with the knowledge of revenue village and forest village boundaries. Additionally, many households voluntarily offered information concerning landholdings within RF boundaries.

3.3.2 Fuelwood Extraction

Fuelwood was one of the two major forest products whose extraction from the RFs of the MTR was observed on a frequent basis during the course of this research. During multiple and prolonged forest visits by the author to establish transects for bird sampling, residents of neighboring villages were encountered taking away fuelwood as headloads, on bicycles, and hand-drawn carts. The IFD typically allows for such collection for domestic use and expects it to be restricted to ‘dead or fallen’ wood. Survey respondents were queried regarding their fuelwood extraction and whether they were involved in commercial sale of the same. In addition, the author and an assistant conducted a participant observation of fuelwood collection by accompanying collectors into the forest, observing collection methods, asking pertinent questions, and recording relevant data. GPS locations for the entire route taken by the collectors were collected at regular intervals to assess distance of incursion into the RF.

3.3.3 Timber Extraction

Data on timber collection was particularly difficult to obtain. The outright illegality of such extraction coupled with the involvement of militant groups, as well as politicians and IFD officials seemed to make respondents reluctant to talk about it. Forest visits by the author to establish bird sampling transects revealed multiple and extensive signs of selective logging, both old and recent. Additionally, the author conducted participant observation in the form of accompanying two day-long IFD patrols intended to check such activity. Survey respondents seemed disinclined to give information in this regard, and a mere four percent acknowledged involvement in timber collection. The author accordingly utilized key informants to access timber extractors, contractors (who hire extractors), and timber wholesalers to garner relevant data on the role of this commodity on local livelihoods. Due to significant reluctance on the part of households to volunteer information on extensive, ongoing illegal timber extraction, targeted, detailed interviews with 6 individuals involved in the timber business were conducted. These included four timber extractors, one timber contractor (hires extractors for timber collection), and a timber wholesale merchant.

3.4 BACKGROUND AND CONTEXT

3.4.1 The Rural Economy of Colonial Assam

A significant proportion of the population of Assam continues to be rural. Though India as a nation is displaying an overall trend of urbanization, the percentage of Assamese rural residents has remained virtually unchanged since the early twentieth

century (Saikia 2014). Rural Assamese have and continue to predominantly depend on agriculture as a means of livelihood generation. When the British established administrative control over Assam in the second half of the nineteenth century, they saw an area with tremendous untapped potential to produce natural resources and generate revenue, and the Eastern Duars was no exception. The Duars were annexed by the British from the kingdom of Bhutan in 1865, became part of the colonial province of Assam, and subsequently was merged with the district of Goalpara in 1874. Prior to colonial control, the political economy of the Duars was a layered phenomenon with ambiguous territoriality and fluid power relationships maintained through processes that included outright conflicts, shifting allegiances, and the levying of a diversity of taxes and tributes to cement political alliances between local chieftains and the kingdom of Bhutan (Misra 2005). The indigenous inhabitants of the Duars were known by various names, such as *Kachari* (in Assam), or as *Meches* (in the Bengal province), but would refer to themselves as *Bodo* or *Boro* (Endle 1911).

Colonial rule would change this complex spatial and political landscape of the Duars through an overarching administrative project of standardization accompanied by a "civilizational discourse" (Scott 2009). The agricultural practices of indigenous communities (termed *tribes* or *tribals* in colonial discourse) were understood as being unproductive (subsistence) and destructive (shifting), leaving underutilized vast areas of potentially productive land (1899). Such administrative ideology engendered a need for productive, efficient farmers practicing sedentary, intensive, market-oriented production. Subsequent colonial policies mirrored this philosophy through the facilitation of directed

immigration from parts of the colonial province of East Bengal (currently Bangladesh). This philosophy was echoed in the spatial fixing of concrete political territories, the establishment of unambiguous top-down power relations, simplification of systems of taxation and revenue generation, and replacing diverse, shifting modes of production with settled agriculture and scientific forestry as well (Misra 2011).

The colonial administration progressively assumed formal control over vast swathes of land through two sets of policies. The first policy program established administrative control over vast areas of forested land through categorizing them as *Reserved Forest* and setting them aside for the explicit and virtually exclusive purpose of timber production. The second policy initiative brought extensive forested and savannah tracts under the category of *wastelands*. *Wasteland* areas had hitherto functioned as sites for grazing livestock as well as for the collection of a diversity of natural resources critical to rural economies and livelihoods. More critically, such land enclosure dovetailed with an overall administrative policy of curtailing shifting cultivation, the predominant mode of agronomic production across much of Assam. By fencing off land under management categories that either severely restricted (protected forest) or completely outlawed (reserved forest) local access, the colonial government began to increasingly reduce land area available to tribal communities (Saikia 2011). The government-facilitated occupation of wastelands by migrant communities from East Bengal further contributed to an overall reduction of available productive land and ultimately to a sense of tribal land alienation (Vandekerckhove and Suykens 2008).

Colonial land use logic in western Assam in the latter half of the nineteenth century was shaped by the rise of three key commodities – jute, tea, and timber. The political economy of jute was a significant driver of facilitated immigration from East Bengal and resulted in a significant increase in the acreage of land under jute production, as well as a dramatic demographic shift in the Goalpara district (Saikia 2015). Though the land area under tea production in Goalpara was relatively limited as compared to parts of eastern Assam, the tea economy influenced land use in two ways. The Goalpara forests provided wood for the construction of tea chests, and the conversion of *waste-lands*, the enhanced grain production to feed a vast 'tea labor' force that was primarily composed of a number of tribal communities, marginalized by colonial era land revenue policies (1899). Such labor was obtained through largely coercive means from the modern-day states of West Bengal, Odisha, Bihar, Jharkhand, as well as the nation of Bangladesh, and was composed of a variety of tribal ethnic groups, collectively known as the *Adivasis* (Behal 2014, see Appendix Table 6.3) The forests of the Eastern Duars were earmarked as an important area to produce quality timber, specifically the highly valuable hardwood species, Sal (*Shorea robusta*) (Lloyd 1894). The administrative necessity of managing timber-rich forests led to the creation of the Imperial Forest Department (ImFD) in 1864. The policies and practices of the ImFD were informed by a scientific system of forestry with a mandate to maintain, enrich, and extract timber from forested tracts and with scant incentive to understand and incorporate the complex socio-ecological, political, and economic processes that governed the land prior to colonial administration (Misra 2005).

Forestry operations required considerable manual labor and the ImFD faced labor shortages from the outset. To make up for this deficiency, the colonial administration allowed for the settlement of communities involved in forestry operations within RF boundaries in what came to be known as *forest villages*. Forest village residents were granted limited access rights to land for agricultural production, as well as key forest resources (e.g. fuelwood). The colonial government policy to generate forestry labor went together with a strategy to curb one aspect of tribal land use, shifting cultivation, while encouraging another form of production, timber extraction, albeit restricting the latter to labor for the forestry administration (Sharma and Sarma 2014). The attempt to shift tribal communities towards forested areas was part of an overall policy to create more land for farming communities that the British viewed as being more productive, specifically the East Bengali. The directed movement of East Bengali farmers into colonial Goalpara in the early twentieth century increasingly shifted production to an intensive, overtly market-oriented form that in turn drove the development of an extensive credit network as well as a thriving land market (Misra 2007a). With landlords increasingly seeking higher land rents and immigrant East Bengali farmers willing and able to pay them through more commercially-oriented production, tribal communities gradually lost ground to immigrants, thus sowing the seeds for future conflict over land, which was exacerbated as immigrant farmers began to occupy land held as commons (e.g. for grazing) by tribal communities.

The administrative land-grab of forests for timber production and that of wastelands for sedentary agricultural production had far-reaching implications for the

indigenous residents of the Duars at the turn of the nineteenth century. Concomitant directed immigration, both through a coercive system of indentured labor for tea production, as well as through specific policies to attract farming communities practicing sedentary, intensive, and more market-oriented systems of agricultural production were to transform local demography. Tribal communities lost considerable access to forest land and its associated resources through significant enclosure by both the ImFD for timber production (RFs) and the Imperial Revenue Department for agricultural production (Unclassed State Forest). The category of 'unclassed state forest' (USF) was created to exercise government control over vast areas of forest and wooded savannah with the intention of future conversion to agricultural land or addition to RF land (Saikia 2011).

Prior to the advent of colonial control, timber was significant for both local use, trade, and as a form of payment of political tributes (Misra 2005); the Duar forests were the source of this important resource and commodity. These ecological and demographic shifts signaled the beginnings of widespread tribal discontent with the colonial administration as well as post-independence governments, and provided the impetus for tribal peasants to occupy, clear, and cultivate land-parcels within RFs (Saikia 2008).

3.4.2 Post-independence Assam

Since independence, there has been an overall lack of development and a correspondingly very limited set of livelihood options in Assam in general. Significant immigration of Bengali Hindus and Muslims occurred in the early postcolonial era when

the colonial province of East Bengal split away from independent India to become part of Pakistan in 1954. Another surge in East Bengali immigration occurred in the 1960s and early 1970s associated with East Pakistan gaining independence as the sovereign nation of Bangladesh in 1971. Resulting demographic shifts created a general feeling of being demographically swamped by 'Bangladeshis' (a catch-all term for Muslims of East Bengali origin), and of being neglected politically, economically, and culturally by the Indian government, culminating in the Assam Movement (1979-1985). The movement culminated in the signing of the Assam Accord of 1985 which explicitly called for the "expulsion and disenfranchisement of "foreigners"" (Baruah 1986, 1184). The leadership of the movement subsequently became the political leadership of the state of Assam and was viewed as having sidelined Bodo and other tribal leaders who supported the Assam Movement. This led to the rise of the All Bodo Students Union (ABSU) as a dominant political force under the leadership of the charismatic Upendranath Brahma who commenced what would come to be known as the Bodoland Movement.

The Bodoland Movement followed the overall pattern of the Assam Movement in its focus on a particular socio-cultural identity, associated with a specific language, rooted in xenophobic attitudes, and driven by a perceived lack of overall economic development and political marginalization by the dominant Assamese community. Descendants of East Bengali immigrants were and continue to be labeled as foreigners (the Other), even though their ancestors migrated from regions that were part of colonial India, facilitated by specific policies of the colonial administration (Saikia 2016).

Though the ABSU has historically claimed that its political agitation was a peaceful one, it spawned two militant organizations—the Bodo Security Force (BdSF) in 1984 and the Bodo Volunteer Force (BVF) in the late 1980s. Whereas the BdSF subsequently operated independently from the ABSU, the BVF was essentially an armed wing of the ABSU that was constituted as a foil to repressive, violent action taken by the Assam government to quell the growing Bodoland Movement. The activities of these two groups precipitated extensive land cover change in the RFs of the MTR in subsequent years through violence meted on both non-Bodo communities residing in and around the Reserve, as well as on personnel of the IFD.

Taking advantage of a power vacuum within the ABSU following the death of UN Brahma in 1990, the GOI and the Assam government hammered out a hasty political deal that led to the formation of the short-lived Bodoland Autonomous Council (BAC) which offered a semblance of political autonomy to the community. Though widespread dissatisfaction for the BAC rested on various aspects of the agreement, a key point of contention for the Bodos was an imprecise definition of its "territorial jurisdiction" (Baruah 2005), specifically with regard to a number of villages that would only be included within the Council if their Bodo occupants comprised more than 50% of their total population. Since Bodos were not in the majority in many of these villages, Bodo leaders objected to the use of demography as the basis for their "aspiration for autonomy" (Goswami 2006), resulting in the political dissolution of the BAC. The subsequent morphing of the BVF into the militant Bodo Liberation Tigers Force (BLTF) in 1996 precipitated violent conflict between Bodos and Muslims, the Bodos and

Adivasis, and between the BLTF and the rival militant group, the NDFB. Political tensions and ethnic conflict saw a brief lull in the early years of the 21st century with the signing of the Bodoland Accord of 2003 that resulted in the creation of the BTAD and the formation of the quasi-governmental Bodoland Territorial Council. A militant insurgency has however continued through the 'Songbijit' faction of the NDFB, and this outfit continues its demand for a sovereign Bodo nation.

The Bodoland Movement, in both its peaceful and violent forms, created the conditions for considerable and relatively rapid land cover change in the Manas landscape. A key driver of was a demographic reality that plagued both the BAC Accord and continues to be a point of contention post the BTC agreement. The Bodos do not have an ethnic majority within the BTAD which has been the deciding criterion for areas to be included within Bodoland (Vandekerckhove 2009). Ethnic conflict associated with the Bodoland Movement has continued with incidents occurring as recently as 2014, and have resulted in hundreds of deaths and the displacement of thousands of Muslims and Adivasis (Bhaumik 2014; Choudhury 2014b; Hazarika 2014), and functioned as "ethnic cleansing", whether intended or not, of both Adivasi and Bengali Muslim communities (Baruah 1999).

Internal displacement following ethnic conflict has direct land cover change outcomes. For example, displaced Adivasis have frequently moved into RF land, thus generating potential conflict with both the IFD which classifies such practice as *encroachment* and ironically, with the Bodo community, which views the former as interlopers on their ancestral territory, and as competitors for land and its associated

resources. Displaced Muslims, especially from areas on the fringe of or within the MTR boundary, have tended to move towards nearby urban areas where they reside in makeshift refugee camps or on land available in established villages and towns. Muslim farmers have thus stood most to lose, frequently through the aggressive and forceful forfeiture of land in proximity to the MTR that they obtained through informal transactions, i.e. via cash payments without any formal title (personal interviews) or through illegal occupation of RF land (Goswami 2014). The primary reason for such purchases is that the land in question was illegally cleared within RFs of Manas, or was 'forest village' land that is non-transferable from a legal standpoint.

3.4.3 The Forest Rights Act

The portrayal of the relationship between Indian tribal communities and forested landscapes in which they reside in and depend on has historically been schizophrenic, frequently taking the form of a "encroacher" versus "protector" dualism (Suykens 2009). This dichotomy itself rests on the historically widespread depiction of tribal people as destructive "savage brutes", a reaction to which has resulted in an idealized view of such groups as "gentle conservationists" (Diamond 1986, 20). Both colonial and postcolonial forest management agencies portrayed forest-dwelling tribal groups largely as destroyers and *encroachers*, thus justifying policies to evict the latter from forest land, as well as curtail access to forest-based resources. In recent decades, forest-based legislation and IFD policy has attempted to account for tribal forest rights. However, the first significant and formal push for recognition of such rights occurred in the final decade of the

twentieth century, through a process that included the positioning of tribal people as being “integral to the very survival and sustainability of the forest ecosystem” (Government of India 2007, 1). In doing so, the ‘protector’ aspect of the dualism was invoked portraying forest-dwelling communities as possessing ecologically sustainable lifestyles and conservation ethics (e.g. Sen and Lalhrietpui 2006).

The evolution of the strategy of the Ministry of Environment and Forest (MoEF) for forest management is evident from successive ‘National Forest Policy’ (NFP) documents in 1952 and subsequently in 1988. The earlier document, while addressing access to key resources (e.g. grazing, fuelwood) from forested landscapes did not create any space for local, forest-dependent communities in their management. Furthermore, it framed two key forms of local forest use in an explicitly negative light. Grazing was delineated as a “problem” and described as “uncontrolled” and top-down policies were proposed to address this perceived issue, such as instituting a “reasonable fee for the privilege of grazing”. Shifting cultivation was characterized as destructive to forests and the relevant policy prescription was to “wean the aborigines, who eke out a precarious living from axe-cultivation moving from area to area, away from their age-old and wasteful practices.” While highlighting the “relentless pressures arising from ever-increasing demand for fuelwood, fodder and timber” and the ‘adverse’ environmental impacts of shifting cultivation, the subsequent NFP document of 1988 clearly outlined the significance of forest resources for forest-dependent communities. It explicitly engaged with “tribal” populations, characterizing their relationship with forested

landscapes as “symbiotic”, and suggesting a need for involving tribal people in the “protection, regeneration and development of forests” (Government of India 1988).

Following the 1988 document, the MoEF released a set of six ‘Circulars’ directed at state-level bureaucracies, with policies stressing the importance of settling outstanding issues pertaining to rights of “local inhabitants, living in and around forest areas”, including tribal groups (Government of India 1990). The directive focused on i) local claims to forest land being inhabited prior to the assertion of land control by the IFD, ii) eviction of occupants residing on land subsequent to IFD control, iii) fair remuneration for labor rendered to forestry operations, iv) conversion of ‘forest villages’ to ‘revenue villages’ in the event of cessation of resident involvement in forestry work, and v) payment of compensation for loss of life and/or property to wildlife. Though these guidelines were essentially top-down in nature, they were the first clear attempt by the Ministry to provide a framework to address the rights and needs of forest-dependent groups. However, these policies were not implemented at the local level by state government entities. A key 1996 decision by the Indian Supreme Court (popularly known as the ‘Godvarman’ ruling) designed to address the issue of forest destruction precipitated by private or commercial purposes, forbade any regularization of existing *encroachments* without prior permission of the court (Rosencranz, Boenig, and Dutta 2007).

The Godavarman ruling was interpreted by the MoEF as a legal directive authorizing the eviction of tribal and other forest dwellers considered to be illegally occupying forest lands, while turning the focus away from powerful “timber lobby and

forest related businesses" (Dhavan 2002). A related Supreme Court directive issued in November 2001 specifically forbidding the legalizing of any *encroached* land without the Court's approval was utilized by the IFD to launch a nationwide eviction effort to clear forest land from what they deemed as *encroachment*. By 2002, thousands of hectares had been cleared of occupation and hundreds of thousands of families were forcibly removed from their residences using coercive, frequently violent means (Rajalakshmi 2006). Widespread discontent among tribal youth and growing concerns that such government action was fueling the growth of left wing radicalism, led to increased focus by the political opposition of the time on tribal land rights, and contributed to its victory in the 2004 elections (Kashwan 2017).

The newly elected national government in 2004 was keen to check the power of a growing Maoist movement in the tribal areas of central India, thus making it more receptive to the demands of a coalition of tribal activists under the banner of the 'Campaign for Survival and Dignity', as well as key government officials. Additional political pressure came from the increasing support by international conservation bodies for 'indigenous land rights', and recognition by the landmark Durban Accord of the disproportionate costs of PA establishment being "borne locally – particularly by poor communities" (IUCN 2005, 221). The result was the creation of a political space that fomented the drafting of a nascent official document on forest rights, intended to "redress the historic injustice to Adivasis by recognizing their property rights to land, as well as to nontimber forest produce, and the community right of control and management which was appropriated by the forest department" (Sundar 2011, 425). The

newly elected government charged the national Ministry of Tribal Affairs (MoTA) with framing a "law for restoring and recognizing forest rights" (Kumar and Kerr 2012, 756).

Three demands by the national government generated controversy in the initial stage of the drafting of the legislation – i) the inclusion of non-tribal forest-dwelling communities, and ii) setting 1980 as the cut-off year for recognition of occupied forest land, and that iii) PAs be exempt from the proposed legislation. The political power of non-tribal forest-dwelling groups resulted in their being included, except with a more stringent residential baseline – three generations or 75 years of proven land occupation. The activism of pro-tribal civil society groups and politicians pushed the deadline to November 2005, but only for those recognized as STs by the Indian Constitution. Finally, the developing piece of legislation was deemed as applicable to PAs. It was finally passed in 2006 as the *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act*, but came into effect some years later in 2008. It garnered considerable opposition from the 'environmentalist/conservationist' lobby comprising influential, largely urban-based NGOs, as well as from administrative bodies charged with environmental protection and management, who viewed it as a massive give-away of forest land that would primarily result in degradation and destruction of such landscapes and their associated biodiversity. The FRA "did not provide for clearing of forest, or any amount of forest land to be given to every family or individual. Instead, it merely gave statutory right to the land up to a maximum of 4 ha cultivated prior" to its enactment (Kashwan 2013, 619).

Government focus on the relationship between forest-dependent communities and forested landscapes in recent decades has, however, been predominantly driven by electoral imperatives rather than developmental concerns or land rights (Rangarajan 2005; Saravanan 2009; Kumar and Kerr 2012). Approximately a decade since it officially became effective, the FRA's implementation has been limited and well below expectations. The system designated to oversee the roll-out of the provisions of the legislation is plagued by limited resources, limited understanding by potential beneficiaries, and an overall reluctance of relevant government bodies to decentralize power and control over the process, resulting in structural inefficiencies and inaction (Sahu, Dash, and Dubey 2017). Furthermore, the Indian environmentalist/wildlife bloc (IFD, environmental NGOs) has kept up unrelenting pressure on the FRA through a combination of administrative roadblocks and lawsuits, resulting in the legislation becoming a "a hodgepodge of conflicting interests and perspectives" (Kashwan 2017, 134).

3.5 RESULTS

3.5.1 Agriculture

According to the Census of India (Government of India 2017a), a significant majority of the population of the districts of Kokrajhar (93.8%) and Chirang (92.6%) are rural residents. 63.3% of all rural workers in Chirang and Kokrajhar are involved in agricultural work, either as cultivators on their own land or providing labor on land not under their tenure for either a cash payment or a share of the crop (*see Table 3.1*). Of the 215 households surveyed along the Manas RFs, a total of 207 households were dependent on agriculture. This includes a diversity of crops (grain, cash), vegetables, and types of agroforestry (e.g. beetlenut, bamboo). A mere 14 (16.5%) household heads were engaged in gainful employment (e.g. government workers, municipal employees, teachers). The practice of "day labor" involves working for an entire day on a range of occupations (e.g. road work, carpenter, mason, agricultural) for a fixed remuneration. Of 77 household heads involved in this category of work, 67 (87%) worked as agricultural laborers on someone else's farm land. The average daily wage for agricultural labor was INR 175 (approximately USD 3, at the December 2013 exchange rate).

Agricultural production in the Manas landscape is largely rain-dependent and subject to the vagaries of the many rivers that flow down from the Bhutan Himalayas. Cultivable land is subject to submergence by rivers changing their courses, and to frequent flood damage because of rivers overflowing their embankments and depositing coarse, pebbly sand, thus rendering land unsuitable for crop production. Of 118

households whose heads had immigrated into the study area, fifteen (12.7%) did so due to river damage to their previous landholding (*see Table 3.2*).

Table 3.1: Comparative socio-economic statistics for Assam and the BTAD (Sources: Statistical Hand Book, Assam, 2016; Census of India, 2011)

	India	**Assam**	**Chirang**	**Kokrajhar**
% Rural Population	68.8	85.9	92.6	93.8
% Rural Households	68.0	84.6	92.2	93.5
% Literate Population [a]	74.0	61.5	53.9	55.2
% Scheduled Tribe (ST)	7.0	12.4	37.1	31.4
% ST that are Bodo	-	35.1	93.9	80.8
Registered Factories	-	5799	21 (0.003%)	42 (0.007%)
No. Factory Workers / (%)	-	219903	1139 (0.005%)	1812 (0.008%)
% Rural Workers in Agriculture Sector	58.2	49.3	63.3	66.3
% below poverty line	21.9	31.9	-	-

([a] – Definition of a 'literate' person: "A person aged 7 years and above who can both read and write with understanding in any language was taken as literate")

Table 3.2: Household livelihood data

Livelihood Sector	Number of Households	Overall Percentage
Agriculture	207	96.3
Day Labor	77	35.8
NREGA	38	19.2
Shop / Store	36	16.7
Remittance	29	13.5
Land Leasing	18	8.4
Employment	14	16.5

With its location in the *Bhabar* geological zone, the Manas ecosystem is fed by multiple small rivers and streams originating from the Bhutan Himalayas that are largely ephemeral in that they flow only during the monsoons (Shukla and Bora 2003). The porous, gravelly soils of the *Bhabar* zone result in the subterranean subduction of flowing water bodies during the dry season. Hence, even in a land replete with water bodies, the availability of water is seasonal, and subject to the vagaries of the monsoons. Of 179 households that responded to the question pertaining to problems they faced in conducting agricultural production, 138 (77%) cited inadequate irrigation water as a constraint on production. They elaborated on the seasonal flow of most water bodies and the depth of the water-table which made it economically impractical to access aquifers, especially during the dry season. Damage to crops by elephants was reported by 57

(32%) households. Of 118 households that gave a reason for moving to their current land, 15 (13%) did so due to river damage to their land, 37 (31%) due to ethnic conflict, and 43 (36%) to get their own land or to increase their land-holding (*see Table 3.3*).

Respondents also claimed that tribal agricultural production was and continues to be largely organic in nature. A number of household heads acknowledged that they would prefer to use pesticides but were not doing so due to such chemicals being prohibitively expensive, and that they restrict their use to incidents of pest outbreaks (*see Figure 3.1*). The data supports the contention of the above respondents. Adivasi households tend to use the least amount of pesticides, followed by Bodos, whereas the limited dataset for Muslim households suggests intensive utilization (*see Table 3.4*). In the words of a Bodo respondent:

> *"...now in the West they are realizing the value of pesticide-free agriculture and organic farming. Farmers in the BTAD are being encouraged to use chemicals to increase their profit margin. Based on what I've seen, barely a decade back, farming out here was completely organic, but farmers have started using chemicals since. We used to use only cow dung."*

An Adivasi respondent echoed the previous opinion:

> *"See, generally the Bodos and Adivasis very rarely use chemicals. But on the other hand, Muslims know and use chemicals excessively. Tribals actually don't*

prefer chemical manures. And even today if you visit the bazar (market), *if you see someone selling good looking brinjal or any vegetable, they will not buy it. They think that it is pesticide…that chemicals have been used. Actually, one of the factors is that Muslims have got very less land and so they want to produce their crop as much as they can and so they are forced to do this, whereas the others have a lot of land."*

Table 3.3: Household migration data

Reason for moving into study area	**Number of Households**	**Overall Percentage**
River damage to previous land	15	12.7
Ethnic conflict	37	31.4
To increase land-holding	43	36.4
Other	23	19.5

Table 3.4: Household ethnicity and pesticide-use data

Ethnicity	Households using pesticides / (total households surveyed)	% Households using pesticides
Bodo	27 / (91)	29.7
Adivasi	7 / (38)	18.4
Bengali Muslim	8 / (11)	72.7

Figure 3.1: Bodo farmer applying pesticide to his crop on encroached land within the Manas Reserved Forest.

3.5.2 Encroachment

Of the 94 households that were occupying land identified as *encroachment* by the IFD within the MTR, 48 (51%) were Bodo and 28 (30%) were Adivasi. These figures form 48% and 72% of all Bodo and Adivasi households surveyed respectively (*see Table 3.5*). While the predominant reason cited by encroaching Bodo households was either to

'obtain their own land or increase their land-holding' (40%), Adivasi households identified 'ethnic conflict' as their primary reason for occupying MTR land (50%). 'Total landholding' (in *bighas*) of households with encroached land was significantly higher than those without. Respondents who indicated encroaching upon the Manas protected area held significantly (t = 2.130, p<.05) larger landholdings (M = 13.129 bighas) than those respondents who indicated not encroaching (M = 10.609 bighas) (*see Table 3.6*).

Table 3.5: Migration data for encroaching households

Ethnicity	**No. of Encroaching Households**	**Reason for Moving**			
		***River Damage* / (%)**	***Ethnic Conflict* / (%)**	***Increased Landholding* / (%)**	***Other* / (%)**
Bodo	48	6 / (18)	3 / (9)	19 / (58)	5 / (15)
Adivasi	28	2 / (11)	14 / (74)	2 / (11)	1 / (5)
Bengali Hindu	8	0	0	3 / (100)	0

Table 3.6: Encroachment and landholding

Encroached Household	Total Landholding					
	*M**	*SD*	*n*	*t*	df	*p*
Yes	13.1290	9.08920	93	2.130	212	.034
No	10.6095	8.16643	121			

* 1 bigha = 0.13 hectares

In accordance with household survey data, detailed interviews with IFD officials implicated the Bodo and Adivasi communities as the primary occupiers of RF land within Manas.

IFD respondent #3*: "Although the Bodos have been vehemently opposing that kind of idea coming from any quarter, the general perception is that most of the area has been encroached by Bodos..."*

The role of ethnic conflict in subsequent occupation of RF land was confirmed by interview data.

IFD respondent #4*: "Actually they* (the Adivasis) *were all in relief camps which were made after the 94-95 riots. 70-80% of them are forest villagers…no doubt about it. They were occupying their own villages and after the riots, they went to the relief camp in Sanpkata…there was a big camp there. From Sanpkata, once*

they stopped getting any relief and their population also increased and multiplied and some pressure was there from local communities to leave the area…they somehow went and occupied the Jawarbil part which is within the Ripu RF, and they settled in a huge expanse of land."

The presence of a thriving land market in Bodoland enables both Bodos and Adivasis to utilize land as a quick source of liquidity:

Journalist respondent (Bodo)*: "Our people have got a lot of land and what is the need for going to a particular area and encroaching upon the forest area? Why can't they stay in their own land? They have their own land and should not sell it. And people are moving from one side to the other so that they can encroach. And as far as I know, it's very infertile land. It's the lure of money from rich people who want land."*

NGO respondent #4*: "…I definitely feel that there is a land alienation happening among the Adivasis now. It's very easy to live next to the forest...they get all their resources from the forest. They can sell firewood, they have land available to them, 20-30 bighas of land are just there for the taking. It is very fertile when it's recently cleared...it's very fertile all the time. So, after selling this land* (their erstwhile land close to towns) *which is very expensive, at very cheap*

rates...Rs. 20-30,000 per bigha, they are migrating closer to the forest. Sometimes, they sell it even cheaper....10-15,000 per bigha."

Finally, IFD respondents also highlighted the role of the FRA, a legislation intended to "recognize and vest the forest rights and occupation in forest land in forest dwelling Scheduled Tribes and other traditional forest dwellers who have been residing in such forests for generations but whose rights could not be recorded", and whose presence was viewed as being "integral to the very survival and sustainability of the forest ecosystem" (Government of India 2007). The FRA was explicitly intended to rectify historical injustices pertaining to land tenure and access rights of forest-dwelling STs, as well as other traditional forest dwellers (OTFDs). According to colonial records, local people were not forcibly removed from the RFs of Manas at the time of their establishment (Mann 1879). However, a long-standing economy of timber extraction from these forests by local communities was significantly impacted following administrative takeover by the ImFD and its subsequent monopolization of this commodity (Mann 1876; Misra 2005).

Though the FRA offered secure rights to small areas of cultivation established prior to December 2005, it did not allow for further conversion of standing forest land. The legislation is widely being viewed in the Manas area as a carte blanche for Bodos and Adivasis to occupy forest land, if they did so prior to 2006. In the words of an IFD respondent (#2):

"When the FRA was passed in 2006, so many people having vested interest…the dalals (middlemen)*…they said that tribals have now a right to settle in the forest area. In 2008 we had a huge problem from distant villages. People are exploiting the Act. Its purpose was different but the people and some dalals exploited it. They took money from people and told them that they could settle inside the forest because the Govt. of India has passed an Act to give a right to the tribal people to settle in the forest. They don't go through the actual text of the Act."*

A Bodo member of an official committee to evaluate land claims under the FRA in the Manas landscape categorically stated that occupation of land within RFs, even a day before the cutoff date of December 13, 2005 would be recognized and formal tenure would be granted. In response to a question about Adivasi occupation of RF land, he said:

"In the BTAD area, it (the FRA) *only applies to tribal people, not for others. They will not get pattas (land titles) because they have titles to their land in revenue villages. What they have done is that they have left such land and gone into the forest. Land under this Act is only being given out for tribal people."*

He did not mention the category of OTFDs and singled out Adivasis for a pattern of illegal land occupation that other respondents described as applying to Bodo *encroachers* as well.

While eviction drives by the IFD in 2002, following the Godavarman ruling, were alienating large numbers of tribal people from their land, parts of the RFs within my study area were being actively cleared and occupied. The combination of the overwhelming power and control of an ongoing militancy and the associated draw-back by the IFD paved the way for extensive expansion of human settlement. Though Assam has yet to effectively implement the FRA (Press Trust of India 2016), this research found increasing interest within the study area, especially among the Bodo community. As STs, a relatively lenient cutoff date for recognition of rights to land cultivated prior to December 13, 2005 generated considerable interest among Bodos, with the potential for legalizing occupation within RFs during the militant phase of the Bodoland movement. Multiple respondents believed the deployment of the FRA in the Manas landscape would go against the spirit of the legislation given the timeline of settlement within the Reserve. As stated by IFD respondent #4:

> *"What I feel is that the FRA is fine as far as central India is concerned…MP, Chattisgarh, parts of Orissa, and Jharkhand also…over there it is in the spirit of the letter because during that time it was said that when the British converted the whole area and declared part of it as a RF, they didn't take into the consideration the rights of the people who were living there. They might not have followed the spirit of the letter. So, let us assume that historical injustice has been done to those fellows…for that case it is somewhat acceptable, but for northeastern states, I don't quite see the applicability of this law…in the BTAD it*

is a tribal belt and block, the entire area has tribals, they have lands and are landowners. But in those areas of central India, they are not land owners, so I can see the applicability of the Act to them. But for this area, it doesn't have much utility."

IFD respondents mentioned that their departmental budget includes funds earmarked for compensating households they evict from lands under their administrative control. They also expressed dismay at the fact that despite the largesse of the compensatory amount, few households came forward to accept it. A key informant contextualized reluctance to vacate encroached land thus:

"The villagers are trapped between the administration and the militants because the latter has warned them of dire consequences if they accept money to vacate encroached land."

Residents within *encroachments* are known to provide shelter to militants, in addition to acting as informers regarding the activities of security forces (Choudhury 2015).

3.5.3 Fuelwood

A total of 20 households acknowledged involvement in the commercial sale of fuelwood (*see Figures 3.2, 3.3*). Involvement in commercial fuelwood extraction was not significantly correlated to 'landholding'. Commercial firewood extraction was note

associated with the size respondents' landholdings (*see Table 3.7*). There was no significant difference in the landholdings between respondents who indicated engaging in commercial firewood extraction and those who were note involved in the practice.

Though extracting households comprises a mere 9% of all the households surveyed, observations made by the author during multiple visits into the Manas RFs, and during visits to local markets, as well as from participant observation suggest that the scale of the collection of this resource is much larger than the household survey data suggest.

Fuelwood was most frequently observed being transported out on hand-drawn carts and a single handcart load sells for INR 500-700. Hence, a day's collection of fuelwood earned approximately four times the income from a day's worth of farm labor (Rs. 150-200). Participant observation with a group of three fuelwood collectors enabled assessment of distance covered, time spent, and fuelwood load extracted. The group went approximately 3 kilometers into the forest, spent a total of almost four hours on the entire trip, and extracted three handcarts of fuelwood.

The lack of alternative fuel sources in the Manas landscape created an almost exclusive dependence on fuelwood, most of which originated from the RFs. An IFD respondent characterized the situation thus:

> *"Why is firewood extraction happening? Because we are not providing them any fuelwood, gas or whatever. The government…if we are realizing that it is a common property resource and if we want to protect it, then we should give them some alternative."*

Figure 3.2: Fuelwood market on the fringe of the Manas Reserved Forest

Figure 3.3: Hand-drawn cart with fuelwood (Manas Reserved Forest)

Table 3.7: Commercial fuelwood extraction and landholding

Commercial Fuelwood Extraction	Total Landholding					
	M	*SD*	*n*	*t*	df	*p*
Yes	9.0000	5.28316	18	-1.357	121	0.18
No	12.1381	9.54153	105			

A recent study by researchers from the Wildlife Trust of India (a key collaborating NGO for this research) on fuelwood collection and consumption among 142 villages bordering the Manas RF estimated an annual fuelwood requirement of approximately "62,000 tons", of which "more than 50% was collected from forests" (Deka et al. 2016; unpublished conference abstract). The study also estimated that approximately "12% of the population was dependent on the sale of fuelwood and logs as their primary source of livelihood" and approximately 21% "for additional income."

3.5.4 Timber

Despite a paucity of household survey data on illicit timber collection (7 households) from the RFs of Manas data, targeted interviews of individuals involved at different rungs of this commodity chain, and in-depth interviews with senior government officials and key informants with detailed knowledge provided a reasonably comprehensive portrait of illegal timber extraction (*see Figure 3.4*). The most frequently

sighted drivers were i) a paucity of gainful employment apart from agriculture, and ii) the political economy of the Bodoland movement, and iii) the cessation of legal timber extraction by the IFD. A timber extractor can earn up to INR 2,000 from a day's work, approximately eleven times the amount to be earned for a day's work doing farm labor. Timber collectors spent 10-15 days in the forest per month. They also supplemented timber collection earnings with fuelwood extraction. The terms 'CFT' or 'KB' are used interchangeably for a single unit of timber volume in the marketplace.

Respondents familiar with the timber collection in the Manas landscape frequently cited the commencement of the Bodoland movement in the late 1980s as the point in time from when extensive and intensive illicit extraction of timber began to take place. Attacks on IFD personnel and destruction of departmental infrastructure resulted in an institutional drawback from the Reserve, leaving Manas open to both occupation and to the unrestricted extraction of various forest resources, chiefly timber.

> ***IFD respondent #2****: "During the Bodo agitation, a lot of forest department officers had to come out from our interior area. Most of our Beat and Range offices were burned down. Some of the officers were also killed, they were kidnapped, and at one point of time even the state government had to issue an instruction to the department that you bring all the staff to the headquarters for the safety of their life. So, that was the situation. When we came out, what do you think happened to the forest?"*

The institutional mandate of the IFD to manage standing stocks of timber species and to legally extract timber from the RFs concomitantly ground to a halt by the late 1980s. Necessary 'working plans' to oversee department-led timber extraction have not been drawn up since the mid-1990s. Furthermore, according to a key 1996 ruling by the Supreme Court of India, the IFD cannot proceed with timber production in the absence of an approved working plan.

> ***IFD respondent #2****: "See, for harvesting mature timber we need to have a prescription in the working plan approved by the central govt. At present, we don't have a single working plan in currency. All have expired. The last one expired long, long back…about 10 years ago…long back. Thereafter there was no use of preparing a working plan because of the agitation."*

Figure 3.4: An illicitly felled Sal (*Shorea robusta*) (Chirang Reserved Forest)

Illicit timber extraction funded the Bodo militancy throughout the 1990s and continues to do so at present (*see Figure 3.5*). Respondents reported the direct involvement of militant groups in the sale of illegally felled trees, as well as their collection of informal taxes from timber collectors.

> ***NGO repondent #6****: "Now there are two factors behind why this timber felling is still going on. Whenever militant groups want heavy money, big money, they allow the people to take timber and they take taxes from them. Suppose I'm bringing timber after taking their* (militants') *permission. On the way, if I get caught by the forest department, I'll just call them on my phone and tell them that I've been caught. They will immediately come and threaten the forest department and tell them to leave."*

An IFD respondent showed me a phone-text message that he received from a militant group shortly after his team located and dismantled an artisanal timber processing mill within the forest. It read:

> *"We are calling from the jungle tiger party. To cut the local trees we established a mill. You then came and destroyed that mill. In doing so you showed extreme disrespect. Now the public is pointing a bad finger at us. We sent you a letter requesting you to not dismantle the mill. We gave you a warning but you went ahead and dismantled it anyway. You did it for a promotion, right? Now we will*

give you a direct promotion upwards! We have now been given the authority to install another mill and if you try to remove it, we will shoot you directly."

Figure 3.5: Artisanal timber processing mill (Chirang Reserved Forest)

Continuing militancy in the Manas forests contributes to the IFD reluctance to resume forestry operations and at the point of conclusion of fieldwork, the RF managers remained without an active working plan. However, the demand for timber remains strong, thus providing motivation for non-departmental, or illicit felling, especially given the paucity of livelihood options.

Bengali respondent #1*: "At one end, it's about livelihoods and at the other end our forests are disappearing. If here is the forest and here is our house, and we don't have any agriculture or cows or livestock, then we'll have to somehow feed ourselves thrice in a day. For that we need money and where will we get that from? By doing haajira* (day labor) *one gets INR 150 in a village, and sometimes just INR 100. And by cutting a tree we can get INR 1000 for 2 hours of work. So why would I labor for so little money? I'll go cut a tree instead. So, people cut trees and since their houses are near the forest, they keep the felled logs nearby. In a few days, a middleman comes to purchase the timber."*

However, profiteering from timber extraction was not confined to rural residents of the Manas landscape. The economic benefits were spread across a diversity of stakeholders.

IFD respondent #4*: "So, when I say that there are local villagers or militants involved in the trade, it is wrong. Almost all persons with uniform, without uniform, civilians, political organizations, everybody is involved. So this was actually asked to me last year by the DC in a meeting that the militants are responsible for it, and my basic premise was that I agree that militants are inside and outside the forest but they are not sitting all over Bongaigaon, Chirang, Guwahati, Dhubri (slight chuckle)…it's not like that they are standing with guns and letting the trucks go and selling and taking money…it's not like that…the*

very simple thing is that timber is being taken out of the forest, everybody is party to it…"

3.6 DISCUSSION AND CONCLUSION

Limitations of the SES model have been pointed out, especially with regard to "a lack of attention to social diversity, and a lack of attention to values and power" (Fabinyi, Evans, and Foale 2014). Livelihood production in the Manas landscape involves a diversity of ethnic groups, both tribal and non-tribal, who employ a range of political and economic strategies and possess varying amounts of political and economic power to ensure household maintenance and survival. The results of this study suggest several specific answers to its initial questions. Firstly, how are different ethnic groups utilizing land either occupied within or on the fringes of the MTR? Agriculture is clearly the dominant form of livelihood production on the fringes of as well as within the Reserve. The relative paucity of alternative means of livelihood generation, in turn highlights the value of land as a critical resource for Manas livelihoods. The economic value of this resource dovetails with its political value in being the geographic basis for an ongoing movement for autonomy by the Bodo people. Agriculture in the Manas landscape was subject to the vagaries of geophysical processes of floods, river erosion, a variable rainfall regime, as well as limited access to irrigation facilities (Government of Assam 2014). Hence, cultivation of the most important food grain, rice, was a limited single crop for a majority of households (72% of all rice growers). Variability and flexibility within household lifecycles was largely limited to involvement in day labor

being the most frequent means of garnering additional household income. A little less than 70% of household heads who were involved in day labor activities had (10 bighas/1.3 hectares or less) of land. Sale of forest resources was an additional means of income generation.

In his landmark historiography of the peasant political economy in Assam since the commencement of the twentieth century, environmental historian Arupjyoti Saikia sums up recent agrarian political economy thus (2014, 327):

> *"Assam's agrarian economy today resembles the nineteenth-century one dominated by smallholding peasant cultivation. The valley continues to be one of the highest producers of jute in India though the role of commercial agricultures is still limited. At the same time, flow of capital into the peasant economy, except by way of state subsidies or government credit, is far below the national average. The peasants consider flood no more than blessings for the agrarian cycle. Irrigation hardly exists. The flagship Indian government programme of Green Revolution of the 1960s and 1970s did not cover the region. Compared to the agrarian situation of Punjab or Haryana that has improved over the decades, the rural peasant economy has worsened in Assam."*

The dominant method of land use among the various tribal communities of colonial Goalpara and the Eastern Duars, as frequently documented by a diversity of colonial entities, was a shifting mode of cultivation demanded by ecological exigencies

of farming in a landscape that did not allow for wet-rice cultivation and where rivers often change their courses, resulting in both a loss of source of water supply, and the loss of cultivable land through flood-induced damage (Goswami 2012). Such ecological vagaries imposed the adoption of diverse livelihood strategies that included share-cropping, forest resource dependence (e.g. timber extraction), and an overall mobility in the culture of farming. Such local practices did not mesh with the colonial administration efforts to organize the forests of the MTR in a spatially explicit manner to establish enclosures in the form of RFs within which local land use was monitored. Resource access was restricted with regard to both types of resources (e.g. fuelwood, thatch) as well as their quantity. USFs were established through the Assam Land and Revenue Regulation of 1886 and provided administrative control over vast areas of forest with the potential of either converting them to agricultural production or setting them aside as RFs for timber extraction (Saikia 2011).

What is the outcome of land occupation within RFs for households? Are total landholdings of *encroached* households higher than *non-encroaching* ones? Occupation of RF land within Manas, viewed as *encroachment* by the IFD, was primarily conducted by the Bodo and Adivasi communities. These communities have a long history of involvement in shifting cultivation practices whereby they possess the cultural and ecological knowledge pertaining to clearing forest for subsequent farming (Vandekerckhove and Suykens 2008; Sundar 2011). Significant increases in landholdings resulted from encroachment. Though respondents were not queried regarding the sale of their prior landholdings, interview data highlighted the presence of

a rapacious land market in which households intending to subsequently move into RF land could readily sell their land, and would do so often at throw-away prices. Respondents also highlighted the need for disposable income as an important driver of land sale prior to occupation of RF land. Repayment of predatory moneylenders providing loans at exceedingly high interest rates, especially because of crop shortfalls or failures, or because of exigencies such as health crises, were primary drivers for the need for disposable income. Sale of previous landholdings before encroachment provided a cash infusion into the household economy since the newly occupied land did not require any payment, except possibly in the form of informal taxes collected by militant groups.

What is the relationship between total landholding and fuelwood collection for commercial sale? Fuelwood collection in the Manas landscape was not significantly correlated to the total landholding of extracting households. However, fuelwood collection for the marketplace is another important form of forest resource extraction that generates cash income, and multiple non-systematic observations by the author revealed a pervasive and intensive system of fuelwood collection from RF land. The IFD has traditionally ignored such extraction and viewed it as a necessity for rural communities with extremely limited or nonexistent domestic energy options. However, current levels and modes of collection are clearly beyond what qualifies as appropriate according to relevant legislation (Government of Government of Assam 1891). My research documents levels of collection that are clearly intended for the marketplace as well as the felling of live, seemingly healthy trees for future fuelwood production. Such

collection is consistent with the fact that 19% of the entire population of Assam uses fuelwood collected from forests and the total volume of forest-derived fuelwood totaled 2.3 million tonnes (Forest Survey of India 2011). As per existing laws, the collection of forest produce can only occur through the filing of a formal claim and its subsequent approval by relevant IFD authority. In reality, the IFD is quite lenient with regard to fuelwood collection from Reserve Forests with the informal understanding that it be restricted to 'dead or fallen' parts of trees, and that it be exclusively for domestic use.

What is the relationship between total landholding and timber extraction? Whereas data collected during systematic household surveys revealed insufficient data to statistically answer this question pertaining to an illicit activity which is given clear priority for containment by the IFD, non-systematic observations revealed pervasive timber extraction from across the Reserve. With no let-up in the demand for timber both nationally and internationally and considering the cessation of legal timber operations in the early 1990s, the timber trade is largely fueled by illicit extraction. In an unpredictable landscape where the Bodos and other tribal communities practice diverse, shifting agricultural production yet to be methodically amalgamated with modern markets through intensification, timber extraction is one of the primary means through which forest resources help mediate risk and provide liquidity. The timber generated from the clearing of forest land fuels an illicit commodity chain, benefitting individuals at its various nodes. It contributes to the incomes of extracting households, militant coffers, as well as the pockets of both government officials and local politicians (Correspondent 2015).

The institutional drawback of the IFD from the Manas landscape is most evident in the lack of an approved *working plan* since the late 1980s. Legal timber extraction and other forestry operations cannot legally continue in the absence of this key document and its associated strategy for forest management. Senior IFD respondents did not appear unduly perturbed by this situation and saw forestry operations as untenable in an environment of militancy and overall political insecurity. They were also aware of the demand, value, and overall importance of this forest resource for the Bodoland economy as well as for their institutional mandate. They also had to know an absence of legal supply would fuel an illicit economy. Hence, in addition to being directly involved in this illicit trade through collecting bribes for turning a blind eye, they have indirectly facilitated it through the absence of a valid working plan (Correspondent 2009).

The practice of unlawful occupation of land, or *encroachment*, further fueled this informal economy through the supply of trees felled to clear land for agricultural production. Illegal logging in turn supplies commercial firewood production through parts of the felled tree that are not valuable to loggers. The militancy has and continues to mediate illicit timber and firewood extraction, as well as encroachment. Erstwhile BLTF members are believed to have been heavily involved in timber removal during their active years. The NDFB, though claiming that their organizational mission included protecting BTAD forests from the timber mafia, are widely reputed to be involved with the illicit business. From collecting informal taxes on timber and firewood bound for the market to the direct involvement of cadres (both *active* and *surrendered*) in extraction operations, the role of militant groups in MTR land cover change is extensive and

layered. During the height of the Bodoland movement in the late 1980s and much of the 1990s, the IFD virtually abandoned the MTR as a direct result of attacks on staff, destruction of department property, and direct threats issued by militant groups. Significant occupation of Manas land by both Bodos and Adivasis occurred during this period with the concomitant loss of forest cover, removal of tree species of timber value, as well as heightened hunting of wildlife species. This research found evidence of threats being issued to IFD officials attempting to control illegal timber extraction.

Like the rest of the state, land has been and remained the key resource for rural livelihoods in the BTAD districts of Kokrajhar and Chirang since colonial times. It is simultaneously the basis for financial liquidity through both formal and informal sale, a site for agricultural production, a source for key resources (e.g. fuelwood, livestock fodder), and an overall tool for mitigating livelihood risk (McSweeney 2004). The socio-cultural, economic, political, and ecological drivers of the relationship between local people and their forested landscape were never comprehensively or adequately incorporated into the philosophy, policy, and practice of the ImFD. Its mandate necessitated a very particular ideological and spatial ordering of the MTR landscape to achieve specific administrative goals that rested on a fundamental separation of the 'social' and 'ecological' domains. This was reflected in the annually published 'Progress Report of the Forest Administration of Assam' which documented that at the start of the twentieth century, 34% of the entire land mass of colonial Goalpara was under administrative control through being classified either as RFs or USFs (Dingwall-Fordyce 1901). Such administrative enclosure coupled with extensive occupation of cultivable

land by immigrant East Bengali farmers in the early 1900s further limited tribal land access and pushed the latter further into areas close to the foothills of the Bhutan Himalayas (Bardoloi 1999).

The postcolonial government in Assam largely continued with the land enclosure policies of the British within the BTAD, while adding the additional administrative layer of biodiversity conservation through the introduction of the Wildlife Protection Act of 1972, thus maintaining a human-nature dichotomy within a historically complex SES. The resulting "land entrapment" contributed to the rise of the Bodoland Movement (Vandekerckhove and Suykens 2008) and its reliance on colonial and postcolonial policy of designating circumscribed territories for tribal groups in Assam, thus fixing ethnicity with geographic space in an arbitrary manner. Though an in-depth exploration of outcomes of the FRA in the Manas landscape is beyond the scope of this research, the legislation has important potential consequences for subsequent land tenure. Given that the establishment of Manas did not involve significant historical injustices to forest-dwelling communities, there are important concerns regarding its applicability to my study area. The relatively recent occupation of land within the MTR stands in sharp contrast to "colonial construction of legal forests and resultant exclusion of tribals and forest dwellers" in other parts of the Indian subcontinent (Kumar and Kerr 2012, 764). However, as discussed earlier, the specific situation within Manas cannot be viewed in isolation from historical and current dynamics (cultural, political, economic) mediating the reality of Bodoland.

The incongruence of such policy with a multi-ethnic landscape, replete with long histories of extensive socio-cultural, political, and economic interaction between different ethnic groups, was relatively ignored by the Bodos in their quest for an exclusive tribal space. As part of the BTAD, the Manas landscape is home to a diversity of ethnic groups – Bodos, Koch Rajbongshi, Garos, Rabhas, Nepalis, Bengalis, Assamese, and Adivasis.

Nonetheless, such a limited consideration of the relationship between Bodos and Manas ignores the political and cultural history of Bodo economy. It is important to contextualize dynamics of land control by highlighting the historic appropriation of forest land by the Indian government (through the FD) without due consideration of the forest-based economy of the Bodos. Bodos have historically used forest resources as a means of mitigating livelihood risk. Hence, extraction of forest resources (e.g. timber) has been an integral part of local economies since centuries (Misra 2005). In recent times, ongoing illegal timber extraction from Manas is a flourishing informal economy that fuels local militant groups. It also feeds bureaucratic corruption and local political coffers. It supplies both expanding urban economies in other parts of Assam as well as provides a source of livelihood to residents of an area that as yet has very limited industrial infrastructure and a severe paucity of urban job opportunities (Government of Assam 2017). Bodos historically and currently practice a largely subsistence form of agricultural production along the forested foothills of the eastern Himalayas, having minimal articulation with commodity markets (Fernandes and Barbora 2002; Saikia 2012). However, such practices are increasingly interacting with and being influenced by

immigrant methods of agriculture that are geared towards cash crops, surplus production, and markets (Das and Saikia 2012).

In conclusion, this chapter articulates the development of a vibrant "livelihood identity" by the Bodo community through the simultaneous deployment of a range of political, economic, and cultural strategies that were not always what "outsiders would like" (Robbins 2012, 225). They simultaneously positioned themselves as traditional forest dwellers and protectors of the forest (see Chapter 4 for details) while increasingly clearing forest landscapes for occupation, agricultural production, as well as to generate lucrative commerce through the extraction of fuelwood and timber. They discursively engaged with modern notions of eco-friendly organic farming while increasingly utilizing artificial chemical inputs and high-yield crop varieties. They were commencing the process of gaining legal title to illegally and recently occupied land within RFs in the study area through a legislation (the FRA) whose spirit is directed at restoration of historic injustices to forest dwelling communities. There is scant evidence to suggest that the establishment of Manas involved the sort of coercive land alienation and restriction of resource access that precipitated the FRA. Meanwhile, Bodos were aggressively attempting to prevent another community, the Adivasis, from gaining legal land control via the FRA, through both physical (through violent conflict) and political (through agitating against Adivasis being conferred with ST status) means. These contradictory tensions, while being an "unromantic accounting of subjectivities", make sense in a landscape of limited avenues of livelihood production where land itself is the most valuable of commodities (Robbins 2012, 226).

CHAPTER IV

POWER NETWORKS, LEGISLATION, INSTITUTIONS, AND ENVIRONMENTAL GOVERNANCE IN THE MANAS TIGER RESERVE

4.1 INTRODUCTION

Human geographers have defined institutions as "the formal and informal rules that define access to natural resources" that are "central to contemporary theories of land-use and land-cover change (LULCC) because they structure the complex and dynamic interactions between society and the environment" (Jepson, Brannstrom, and Filippi 2010, 87). The multidisciplinary and multilevel associations between institutions and land cover change highlights the importance of institutions in enhancing the understanding of forest cover transformation (Tucker and Ostrom 2005). Institutions as 'rules-in-use' mediate access to land, capital, labor, and technology and thus, in turn influence land cover outcomes through creating both opportunities and constraints in the utilization of land and its associated resources. In doing so, they eschew singular or narrow causal explanations, instead drawing attention to multiple, interactive drivers of LULCC. In his study of environmental policy institutions and authority in Rajasthan (western India), Paul Robbins posed important questions – how do institutions work, to whose benefit, and how universally? And in this context, how are rules created, enforced, respected, resisted, or subverted? He suggests that these questions are not simply theoretical but strike to the "heart of daily practice" (Robbins 1998, 410).

Land use both within and on the fringes of the MTR is mediated by formal institutions of the State, in the form of the Indian Forest Department (IFD), as well as both formal (e.g. political parties) and informal (e.g. land use norms) institutions of local people residing and utilizing the Reserve. A rich history of State-led, management of the forests of Manas through a process of abstraction, ordering, territorialization and improvement, mainly for timber production, is preceded by an even longer timeline of use of the same landscape by local ethnic groups. Colonial appropriation, organization, and subsequent enforcement through the establishment of boundaries and rules governing local conduct in the second half of the nineteenth century, was preceded by diverse patterns of local land use mediated by shifting zones of political influence and control, and flexible livelihood strategies (Misra 2011). The colonial administration's formal institutional dominion over the Manas landscape, in the form of Reserved Forests (RFs) was both respected and resisted over the course of the nineteenth and most of the twentieth century (Saikia 2005). From the late 1980s, outright institutional subversion of the IFD commenced, with widespread occupation of RF land as well as non-State extraction of timber. Extensive and intensive extraction of forest resources from this protected area continues to this day.

I argue that an overall "cartographic-legal strategy" of land use promulgated by the colonial State and continued largely without alteration by the postcolonial Indian government has and continues to interact with local institutions through "standards of indigeneity and customary use" by the Bodo 'tribal' community (Wainwright and Bryan 2009, 163). Such historic and ongoing institutional interactions have resulted in a

simultaneous Bodo retreat from, as well as engagement with State institutions through the crystallization of a self-realized, ethno-nationalist tribal identity that forms the basis of legal claims to land and its associated resources, as well as political power. Such contingent articulations of a specific identity simultaneously benefit the Bodos, and the State, and results in a diversity of outcomes relevant to the management of a landscape that is simultaneously a landscape of timber production and a protected area for biodiversity conservation. This research attempted to answer the following questions:

How are land use and associated practices within and on the fringe of a protected area being mediated by formal and informal institutions of local people, civil society, and the State? Specifically,

a. *What characterizes the gap between environmental legislation and its implementation?*
b. *How is this gap enacted, and what networks /structures of power widen or maintain this gap?*
c. *Who benefits from such a gap and who loses?*

4.2 STUDY SITE

Manas is part of the Indo-Burma 'biodiversity hotspot' (Conservation International 2012) region. It is located between 26°45′ - 26°50′ N latitude and 90°30′ - 91°15′ E longitude. The climate of the reserve is subtropical in nature with an elevation that ranges between 40 – 170m (an average of 85m). The area receives between 3,000 –

4,000m of rainfall annually and annual temperatures range between 6 – 37 °C. The core area of the Manas is a National Park (NP). Manas was initially established over an area of 360 sq. km. sanctuary in 1928 as the 'Reserve' on what was once the hunting preserve of the royal families of Cooch-Behar and Gauripur (Maharajah of Cooch Behar 1908), and expanded to 391 sq. km. in 1955. In 1973, the MTR was created under the *Project Tiger* initiative, covering 2,831 sq. km. in five districts of Assam (Kokrajhar, Bongaigaon, Barpeta, Nalbari, and Darrang) with the Manas Reserve or Wildlife Sanctuary as its core area and many RFs comprising its buffer zone. A section of the core area of Manas was officially recognized as a UNESCO 'World Heritage Site' (WHS) in 1985. Manas was declared a 'National Biosphere Reserve' in 1989, followed by an upgrade of the Wildlife Sanctuary to a NP with an addition of approximately 110 sq. km. In 1992, the Manas WHS was labeled as a site 'in danger', and was almost a decade later, in 2011, that the tag was removed. In 2016, approximately 350 sq. km. were added to the NP, to give it a total area of approximately 850 sq. km.

Manas is home to a number of mammal and bird species classified as *endangered* by the International Union for the Conservation of Nature's *Red List of Threatened Species* (IUCN 2017a), at least one *critically endangered* mammal (the Pygmy Hog), as well as at least one *critically endangered* bird (the Bengal Florican). This study is confined to three large RFs located west of the NP – the Manas, Chirang, and Ripu RFs. These large blocks of forest are located within the Kokrajhar and Chirang districts, which in turn are part of the semi-autonomous Bodoland Territorial Area Districts (BTAD or Bodoland).

4.3 METHODS

This paper utilizes data from research conducted between 2013 and 2016 amongst personnel of the IFD, civil society groups, and rural households, residing adjacent to the three large Reserved Forest (RF) areas that constitute approximately three-quarters of the entire land area of Manas – Ripu RF, Chirang RF, and Manas RF. Fifty five detailed semi-structured interviews with IFD personnel, academics, journalists, members of civil society groups were conducted. Formal surveys of 215 agrarian households, supplemented with extensive archival research, and media studies, were also utilized to evaluate the workings and interplay of a diversity of formal and informal institutions operating in the Manas landscape.

4.4 BACKGROUND AND CONTEXT

4.4.1 Colonial Forestry in Assam

The roots of colonial forestry in India are situated in social, political and economic contexts in pre-colonial Britain, specifically the "Agricultural Revolution in England" that associated the clearing and subsequent cultivation of "wastes" as "signs of progress" (Rangarajan 1994, 152). The project of colonial forestry involved a systematic ordering of forested landscapes through the production of distinct administrative categories, and a level of bureaucratic control over forest access hitherto undocumented in pre-colonial governments. The official ideology underlying this mode of governance was explicitly in line with commercial production and management. The importance of forests to empire lay in their clearing for generating fresh land for agricultural

production, political control over newly acquired space, access to valuable forest resources, and denying space to particular categories of citizens. Colonial forest policy was informed by conflicting streams of Orientalist thinking, varying between portraying pre-colonial utilization of forests as driven by rural, ecologically sustainable use versus hegemonic control of forest access by local rulers (Sivaramakrishnan 1995). Such selective and frequently self-serving invocations of pre-British systems of forest resource use reflected the internal conflicts within the colonial forest administration generated through its encounters with the diversity of local systems of forest use across the subcontinent.

Prior to the mid-nineteenth century, the British East India Company and subsequently the British colonial administration had exhibited permissive attitude towards Indian forests; timber extraction was both intensive and extensive in scale (Sivaramakrishnan 1997). By the 1850s, a perception had taken hold that depletion of the forest resource of the subcontinent had begun to "assume a serious aspect" (Smythies 1925, 6). It laid the foundation for the passage of a key legislation, the Indian Forest Act (1878) that established colonial control over vast areas of forested landscape to cater overwhelmingly to imperial requirements, while significantly curtailing local customary access. The Indian Forest Act (IFA) of 1878 was met with criticism from within the colonial administration, predicting widespread public discontent due to the elimination of "centuries of customary use of the forest by rural populations all over India" (Guha and Gadgil 1989, 145).

Forest management in colonial Assam, like in the rest of the subcontinent, was predicated on an official mandate to establish managerial control over forest lands and associated resources, while simultaneously severely limiting or outlawing public access. The early period of colonial occupation was marked by an overall lack of attention to any form of forest conservancy, and the focus was instead on production with forested land being viewed as *waste* since it was not being utilized for agriculture (Misra 2005). The founding figure of colonial forest policy was the German botanist and forester Dietrich Brandis, whose foundational monograph titled 'Indian Forestry' expressed a distinct market-orientation through a focus on reliability of timber supply and on the importance of product consistency (Brandis 1897). The significant consumption of timber resources by the development of a vast railway network, and its future needs through both expansion and maintenance, generated an official desire to conserve and manage forested landscapes (Guha and Gadgil 1989). The result was the formation of the Imperial Forest Department (ImFD) in 1864 with an overarching administrative policy of prioritizing revenue generation and an overwhelming focus on the production of a single commodity – timber.

While ostensibly couched in the logic of scientific management, the workings of the ImFD were distinctly tilted towards commercial exploitation. Commercially valuable tree species were explicitly favored over those that were not of interest to the timber market, with the latter being labeled through discursive means as "inferior", thus reflecting the underlying administrative logic (Tottenham 1907). The colonial State virtually ignored traditional, pre-colonial economies of timber extraction and made no

effort to incorporate local expertise in the development of official systems of timber management. Additionally, the ImFD attempted to control tribal land use through specific imaginaries of their agricultural practices, specifically the widespread system of shifting cultivation or *jhum*, which was frequently characterized as primitive, inefficient, and destructive (e.g. Hodgson 1849). Shifting cultivation was the bane of the colonial administrator because it competed with the State in control over land, often occurred in areas with prized timber species, and was viewed as not being as conducive to revenue generation and production as intensive, settled forms of agriculture. Local hunting practices were described as "reckless" and destructive (e.g. Mann 1876), while large-scale hunting expeditions by colonial officials and local elites, resulting in the whole-scale killing of scores of game species was considered a mark of social status (Bhupa 1908).

4.4.2 Colonial Forest Policy, Legislation, and Management in Western Assam

The forests of the MTR came under the purview of the colonial administration after the Eastern Duars were formally annexed from Bhutan following the 'Dooar War of 1864-65 and subsequently became part of colonial Goalpara in 1866 (Rennie 1866). The landscape was subsequently organized administratively during the remaining colonial era through three key pieces of legislation. The Indian Forest Act of 1878 (henceforth, Forest Act), while discursively improving on its predecessor, the Forest Act of 1865, through acknowledging local land use and associated claims, was an extensive administrative land-grab by the colonial State. It established the right of the colonial

state to organize forest landscapes under three distinct categories – Reserved Forests (RFs), Village-Forests, and Protected Forests. RFs placed the landscape and its resources under the direct control of the ImFD, significantly restricting public access and use. Village-Forests could be constituted through the de-reservation of RFs to allow for rural populations to access "timber or other forest-produce", with the State retaining the right to "make rules for regulating" local use as well as the right to "cancel such assignment" (pg. 17). Protected Forests retained administrative control over "any forest-land or waste-land which is not included in a reserved forest…or to the whole or any part of the forest-produce", including individual trees in such forests (pg. 18).

The second piece of legislation relevant to the exercising of administrative control over western Assam forests was the Assam Land and Revenue Regulation of 1886. It formally created a novel category, "Unclassed State Forest" (USF) that essentially absorbed areas labeled as 'Unreserved Forest' by the ImFD prior to the Forest Act of 1878. The only types of land exempted from coming under the purview of this Act were "reserved forest" and "any land which the State Government may, by notification, exempt…" (Government of Assam 1886, 6). The Assam Revenue Department thus established control over "any tracts of forests…that had not been transferred to any person in any form" (Saikia 2011, 125). Through this legislative mechanism, the State established control over vast areas of forest and savannah landscapes that were not currently suitable for categorizing as RFs but could be of potential use for future reservation as RFs or for the planting with monocultures of tree species of timber value. Furthermore, the Revenue Department had authority to allow for

agricultural expansion, for private enterprise (e.g. rubber, tea), as well as for the extraction of various forest products, including timber.

The third legislation, the Assam Forest Regulation of 1891 furthered the colonial control over forest landscapes through the introduction of a very specific piece of language (Section 3, Part 8) – "land at the disposal of the Government". Such categorization paved the way, in addition to the categories already specified in the Forest Act (1878), for inclusion of all USFs under the purview of the ImFD, resulting in a total area of "7,140 square miles in 1893" (Saikia 2011, 94) which comprised a little over 12 percent of the entire geographical extent of Assam. A subsequent Resolution of the ImFD in 1896 formally equated 'land at the disposal of the Government' with USFs, while stating that the new category only included "forest lands". However, the Resolution admitted that with "regard to the definition of 'forest lands'…no hard-and-fast definition was necessary" (Handique 2004, 69). None of the three legislations attempted to explicitly define the meaning of the term *forest*, and this vagueness provided the State considerable latitude in its interpretation of what a *forest* might be, and hence enabling it to establish administrative control over a variety of ecosystems and habitats.

In the twentieth century, revision to national forest policy occurred in the form of the 1927 Amendment to the Forest Act which attempted to codify and clarify the diverse powers of the ImFD with regard to illicit extraction of and damage to forest resources, as well as illegal trespass through both Reserved and Protected Forests (Haeuber 1993). The Assam Forest Regulation too was subject to a series of Amendments that

decentralized power to the local government to effect land cover change in Reserved Forests (1912) and to levy duties on forest produce (1922). A 1933 Amendment to the Regulation enabled the Assam ImFD to enable control over even privately-owned forest land. With such extensive power and control over a diversity of forest land categories, government policies (the ImFD and the Revenue Department in particular) and resulting practices would come to have far-reaching outcomes for land use, land cover change and the rise of tribal ethno-nationalism in colonial and post-independence Goalpara.

4.4.3 Postcolonial Forestry: The Legacy of Colonial Management

Forest policy in the post-independence era explicitly engaged with the sustainable provision of ecosystem services and their role in wildlife protection. The National Forest Policy (NFP) of 1952 highlighted the importance of the role of forest ecosystems in maintaining watershed stability, as well as the sustainable provision of a diversity of product for both rural and infrastructural development. The discursive shift was not matched by a concomitant alteration of the regulatory control at the heart of colonial policy and commercial exploitation remained a key component of the overall agenda of the post-independence IFD till the 1970s (Saikia 2011). While acknowledging the importance of access to forest dependent communities, the adverse colonial view of certain types of forest resource utilization persisted into the postcolonial era, specifically pertaining to livestock grazing and shifting cultivation.

Due to extensive and rapid deforestation between the 1950s and 1970s, the Government of India (GOI) attempted to exercise control over state governments

through a constitutional amendment in 1976 that provided the former a degree of influence over the latter in forestry issues. The amendment was followed by the Forest (Conservation) Act of 1980, the first legislative effort by the GOI to explicitly exercise control over state governments. It stated that "no State Government" would i) de-reserve a RF either in whole or part, ii) use forest land for "non-forest purposes", iii) assign forest land to either private or individual interests, and iv) clear forest land for subsequent afforestation without the permission of the GOI. The Ministry of Environment and Forests was established in 1984 to oversee compliance with established forest laws but has since been a "weak enforcer" (Kumar et al. 2000). Whereas the 1952 policy emphasized a sustainable supply of timber and non-timber forest products for the nation's development needs, the National Forest Policy of 1988 shifted the focus to the role of forests in maintaining "ecological equilibrium" and relegated "economic benefit" as subordinate to an overall conservation ethic. It explicitly identified "ever-increasing" collection of a diversity of resources (timber and non-timber) as well as "diversion of forest lands to non-forest uses without ensuring compensatory afforestation" as significant drivers of forest loss and degradation. In doing so, it provided direct motivation for one of the most extensive and consistent activities of the FD – planting trees.

4.4.4 Postcolonial Biodiversity Conservation

The foundation of biodiversity conservation in independent India was laid in the early 1970s by then prime minister, Indira Gandhi who, while recognizing the colonial

foundations of "international environmentalism", appreciated the importance of wildlife conservation, as well as the need to address inequity, not just as a social justice issue, but for its role in mediating the interaction between humans and nature. Under Gandhi's leadership, the Indian State officially engaged with two international models of environmentalism that were at odds with each other in that the one engaged with notions of socio-environmental equity and justice (the Biosphere Reserve model) whereas the other privileged ecosystems and non-human species (the Protected Area model). The resulting tensions had implications for biodiversity conservation as well as natural resource access for several forest-dwelling communities.

4.4.4.1 Biosphere Reserves

The 'Man and Biosphere' (MAB) program of UNESCO was established in 1970, and initiated globally in 1971. The idea of a 'biosphere reserve' (BR) originated at the Biosphere Conference' held in Paris in 1968, with the official title of 'Scientific basis for Rational Use and Conservation of the Resources of the Biosphere'. Such a declaration of the simultaneous use and conservation of natural resources was unprecedented, and occurred over two decades before the ground-breaking Rio Earth Summit of 1992, where the idea would garner political support at the highest levels. The MAB program's overtly interdisciplinary focus combined "the natural and social sciences, economics and education to improve human livelihoods and the equitable sharing of benefits, and to safeguard natural and managed ecosystems, thus promoting innovative approaches to economic development that are socially and culturally appropriate, and environmentally sustainable" (UNESCO 2017e). In contrast to the *national park* model, the *biosphere*

reserve concept explicitly engaged with the human dimensions of environmental conservation through its use of terms such as “sustainable development”, “involvement of local communities in management”, “traditional knowledge”, and “conflict resolution of natural resource use” (UNESCO 2017d).

The MAB program was launched within India in 1972, under the leadership of then Prime Minister, Indira Gandhi, who in a speech to the United Nations’ Conference on the Human Environment of 1972 highlighted the link between environmental preservation and human livelihood security thus:

> *“Are not poverty and need the greatest polluters? For instance, unless we are in a position to provide employment and purchasing power for the daily necessities of the tribal people and those who live in or around our jungles, we cannot prevent them from combing the forest for food and livelihood; from poaching and from despoiling the vegetation. When they themselves feel deprived, how can we urge the preservation of animals? How can we speak to those who live in villages and in slums about keeping the oceans, the rivers and the air clean when their own lives are contaminated at the source? The environment cannot be improved in conditions of poverty” (LASU-LAWS Environmental Blog 2012)*

This was, however, done exclusively at a national level and the status of Indian BRs was not elevated to inclusion within UNESCO’s ‘World Network of Biosphere Reserves’ list. In contrast to the ‘national park’ model in India whose antecedents lay in

a combination of pre-colonial princely game reserves, colonial efforts at nature preservation, and the American archetype (exemplified by Yosemite NP), the advent of BRs was driven by the rise of the ecological sciences in the early 1970s. Ideologies informing the setting up of NPs and wildlife sanctuaries inordinately focused on non-human nature and frequently positioned local humans and their use of the landscape as detrimental to the management process. The biosphere reserve idea, on the other hand, was informed by the belief that "people dependent upon their local ecosystems for survival, needed to be included in any planning for preserving nature in protected areas" (Lewis 2015, 233). Despite extensive planning and substantial expenditure of funds on research since its inception, the biosphere project has done little to alter the status quo of protected area management in India.

The environmental historian, Michael Lewis (2004; 2015) provided a detailed account of the international, national, and institutional politics underlying his assertion that the 'biosphere reserve' appellation is simply "one more title" for existing PAs in India (2015, 234). According to Lewis, the key characteristics of MAB that mediated its overall ineffectiveness in the Indian context, were i) its global nature, ii) its overwhelming emphasis on science and scientific research, and iii) its inattentiveness to the national and local institutional politics and realities of environmental management. The international character of the governing bodies was not conducive to the passage of national/local laws to govern BRs. The prominence of ecological research and monitoring elevated the role of scientists and created the potential for their increased control over budgets and managerial processes. Finally, Indian bureaucrats were not

particularly interested in relinquishing authority or funding to scientists. Since the core zones of most potential BRs would be established national parks, government administrators exhibited scant enthusiasm for the prospect of taking on a radically more complicated system of natural resource governance, with diminished power and access to funds. India did not formally register its initial BRs with MAB, and when it finally commenced doing so since 2000, "Indian biosphere reserves had a solid institutional history of irrelevancy" (2015, 235).

4.4.4.2 Protected Areas

4.4.4.2.1 National Parks and Wildlife Sanctuaries

The passing of the Wildlife Protection Act (WPA) of 1972 was the first legislative foray of the IFD into biodiversity conservation. It granted the State extensive and intensive control over many aspects of wildlife species and their ecology (Lewis 2015). It introduced new *protected area* categories such as "sanctuary" and "national park" whose declaration imposed substantial restrictions on human residence within, on the utilization of enclosed resources (especially wildlife), and a slew of responsibilities on individuals permitted to reside within them to assist formal management. The Act reserved space for tribal members on its "Advisory Board" and allowed for "measures to be taken for harmonising the needs of the tribals and other dwellers of the forest with the protection and conservation of wild life" (pg. 7). Curiously though, it allowed for only a single tribal group to exercise their "hunting rights" – the "Scheduled Tribes of the Nicobar Islands in the Union territory of Andaman and Nicobar Islands" (pg. 42).

4.4.4.2.2 Tiger Reserves

Indian 'tiger reserves' (TRs) were established as a direct result of a ground-breaking 1973 initiative by the Government of India titled 'Project Tiger' that envisioned such reserves as "constituted on a core/buffer strategy", with 'the core' having "the legal status of a national park or a sanctuary", while 'the buffer' would be "managed as a multiple use area" (Government of India 2017c). While the official framing of TRs seemed to align with a social-ecological approach to management, de facto practices of the FD had, and continue to be, largely consistent with an overall policy of excluding humans from the landscape, driven by an administrative ideology that views the coexistence of tigers and people as a nonstarter (Rangarajan and Shahabuddin 2006). The result was a portrait of local communities as destructive, wasteful, ignorant, and callous modifiers of tiger habitat, thus providing justification their removal from areas earmarked for tiger conservation, and the subsequent creation of "inviolate areas" that are "fully secured, enclosed and policed by gun-toting wirelessly wired forest officials" (Bijoy 2011, 36).

The bureaucratic system charged with tiger conservation and management has considerable support from the conservation biology community, and their fundamental ideology was, and continues to be echoed by a predominance of a "tiger conservationist" mode of thinking invested in biodiversity conservation in general, and tiger preservation specifically (e.g. Karanth 2005). The policies emanating from this approach advocate primarily for "inviolate" spaces for the sustainability of tiger populations (Ranganathan

et al. 2008; Harihar and Pandav 2012; Singh et al. 2017). The justification provided for the importance of such human-less landscapes rests primarily on the claims that i) tigers need "inviolate" spaces devoid of human presence (Jhala, Gopal, and Qureshi 2008; Jhala et al. 2011; Kanagaraj et al. 2011), ii) tigers require robust wild ungulate prey densities that are disproportionately found in areas with minimal human disturbance (Karanth et al. 2004; Awasthi et al. 2016), especially with regard to livestock presence (Carter et al. 2012), and that iii) TRs function as loci for 'source' populations in a 'metapopulation' system (Wikramanayake et al. 2004; Thapa et al. 2017).

Recent research has demonstrated the persistence and co-existence of tigers with humans at fine spatial scales (Carter et al. 2012), and the presence of healthy tiger populations in human-dominated landscapes (Chanchani 2015; Andheria 2016). In addition to wild ungulate prey species, domestic livestock forms an important component of tiger diets across the subcontinent (Madhusudan 2003; Avinandan, Sankar, and Qureshi 2008; Wang and Macdonald 2009; Karanth et al. 2013; Singh et al. 2015), in conditions of both high (Bagchi, Goyal, and Sankar 2003) and low wild prey biomass (Khorozyan et al. 2015; Rajaratnam, Vernes, and Sangay 2016). Additionally, tiger landscapes with high livestock density can retain high densities of ungulate prey species (Chanchani et al. 2014), and vibrant ungulate densities have been recorded outside of TRs (Carter et al. 2012). Recent documentation of healthy tiger numbers outside of established TRs raise questions for the characterization of resident tigers as "source" populations (Chanchani et al. 2016; Andheria 2016). Concomitantly, declining

populations within TRs raise fresh questions about appropriate management strategies for ensuring tiger sustainability (Singh and Macdonald 2017).

Given the overwhelming reality of tigers currently surviving in proximity with dense human populations across the Indian subcontinent, measures to ensure the sustainability of these large carnivores necessitates the viewing of tiger landscapes as social ecological systems (Rastogi et al. 2012). Current managerial policies and practices continue to focus overwhelmingly on the idea that the future of tigers in India is best served by ensuring conservation enclosures devoid of human presence, thus sidelining and consequently devaluing areas of cohabitation. While the human-dominated landscapes bring with them the potential of human-tiger conflict, relatively less effort is being made to identify the cultural, political, and economic factors that enable co-occurrence with such large, potentially dangerous carnivores (Athreya et al. 2013; Banerjee et al. 2013; Chapron et al. 2014; López-Bao et al. 2015; Carter and Linnell 2016). Instead, a bulk of existing research has been conducted by biologists within PAs with a tendency to "to fit complex realities into disciplinary prerogatives organised around creating dichotomies (like nature–culture)" (Ghosal et al. 2013, 2665). This research emphasis and its focus on 'human-tiger conflict', sidelines relationships between human communities and tiger populations that are not exclusively based on strife but instead on coexistence and coadaptation (Aiyadurai 2016; Reddy and Yosef 2016; Benanav 2017).

Local human populations continue to be identified as the principle drivers of disturbance within and degradation of tiger habitat in TRs (Karanth 2005; Kanagaraj et

al. 2011; Harihar and Pandav 2012). Such claims have provided justification for and precipitated widespread eviction, both voluntary and forced, of communities from TRs (Lasgorceix and Kothari 2009). A clear majority of such relocations involved socio-politically and economically marginalized groups, and were conducted without adequate planning, transparency, and sufficient attention to livelihood sustainability post-displacement, resulting in "proletarianisation and pauperisation" (Kabra 2009, 249). Meanwhile, the environmental impacts of a long and continuing history of resource extraction (e.g. timber, minerals, sand, and gravel) from TRs by distant, and often politically and economically powerful entities, frequently with the active collusion of the Indian State, have been virtually ignored by purveyors of the dominant tiger conservation paradigm (Rangarajan and Shahabuddin 2006; Vadlamudi 2017). Such dynamics were rarely detailed in the literature published by the 'tiger conservationist' body and often relegated to a footnote, such as a generalized ascription to a nebulous "development" (Kanagaraj et al. 2011). In a supreme twist of irony, there were instances of evictions of communities whose residence in tiger reserves had been historically facilitated by the State to generate labor for forestry operations (Shahabuddin 2009).

4.4.4.2.3 World Heritage Sites

The 'World Heritage' program, like the MAB one, is administered by the UNESCO and was established in 1972 after the 'Convention concerning the protection of the world cultural and natural heritage' of outstanding universal value, commonly known as World Heritage Sites (WHSs) (UNESCO 2017f). The Convention defined criteria for the inclusion of sites on a 'World Heritage List' as well as the responsibilities

of ‘State Parties’ (participating nation states) in their protection and preservation. It established a ‘World Heritage Fund’ to provide need-based financial assistance to inscribed sites. State Parties were obliged to provide regular reports on the state of the conservation of their sites. Finally, it enabled the establishment of a ‘World Heritage Committee’ (WHC) that was responsible for the implementation of the Convention, the allocation of financial assistance, the evaluation of State Party reports, and the preparation of a ‘List of World Heritage in Danger’ due to destruction, alteration, because of, among other factors, the ‘outbreak or the threat of an armed conflict’. Based on said reports, the committee was empowered to decide on both the inclusion as well as removal of sites from the ‘in danger’ list. As of July 2017, the total number of WHSs stood at 1073, located in 167 countries, of which 206 were recognized for their ‘natural heritage’, and 54 were labeled as being ‘in danger’ (UNESCO 2017g).

The Convention’s definition of ‘natural heritage’ lacks explicit ecological criteria, and is limited to relatively vague descriptions such as being of ‘outstanding universal value from the point of view of science, conservation or natural beauty’ and that is ‘unique and irreplaceable’ (UNESCO 2017b). Ecological theory and principles are not “written into the requirements for the World Heritage Convention, as it is for BRs in the MAB program” (Lewis 2004, 225). At the same time, its preservationist imperative places stringent limits to the extent of detrimental modification that a given site can be subject to. WHS status can be “revoked if the ecological condition inside a site continues to decline to the extent it loses the values that are the basis for its listing” (Allan et al. 2017, 48).

4.4.5 Tribal Land Alienation

The Bodos, like all tribal communities of Assam, were directly affected by the policies and practices of colonial forestry. The enclosure of land that had been used historically by the Bodo people, both in the form of RFs and USFs resulted in loss of access to a diversity of resources, including timber, grazing, and wild meat. Their traditional method of shifting cultivation was portrayed in the official discourse as primitive, destructive, inefficient, and unproductive.

Since the early nineteenth century, the official gaze of the colonial administration viewed forested landscapes as 'wastelands' since they were neither generating revenue nor producing crop (Government of Government of India 1899). Through land tenure policies designed to attract tenants with low rents as well as an attractive initial rent-free period, the colonial administration attempted to facilitate the clearing of forests for settled cultivation. Such schemes privileged local communities, particularly an ethnic group known as the *Koch Rajbongshis,* that were increasingly practicing settled methods of agricultural production, at the expense of tribal communities such as the Bodos. Such progressive occupation of forest land resulted in a class of landlords known as the *jotedars* who would sublet their lands to both tenants and sharecroppers (Misra 2005).

By the second half of the nineteenth century, a vast majority of forested land within colonial Goalpara came under the direct supervision of the ImFD in the form of RFs, or under revenue department mandate in the form of USF. Reserve forests were viewed as repositories of timber for burgeoning administrative infrastructure, particularly the vast developing railway network, whereas the un-classed state forests

reflected the colonial State's "ambiguous attitude to the vast unutilised forest area and the agrarian economy" (Saikia 2005, 98). Though the rise of the *jotedars* facilitated increasing clearing of forests, as the pace of land cover transformation and subsequent production was not satisfactory for the colonial administration. The administrative view of local, tribal agriculturists as unproductive and their productive behavior viewed as contributing to land not generating tax-based revenue, provided the incentive to facilitate the immigration of the type of farmers who were considered industrious and better affiliated with commercial production. Increasing clearing of forested land under the *jotedars* provided agricultural space for precisely the type of agriculturists that the administration desired—land-hungry farmers from East Bengal. This movement was aided by the brief unification of Assam and East Bengal as a single province from 1905-11. The economic ascendance of two key commodities, tea and jute, further contributed to tribal alienation in colonial Goalpara through significant demographic shifts driven by immigration of both farmers (jute) and laborers (tea).

The effect of forestry policy dovetailed with revenue and agricultural policy through a focus on revenue from land rent as well as a priority on intensive agriculture. Policies to settle immigrants from other parts of the subcontinent, specifically East Bengal, resulted in profound shifts in demography, ethnic composition, patterns of land use, and modes of production. Within a decade from the commencement of immigration (1904-05), approximately a fifth of the entire population of Goalpara was composed of migrants from East Bengal. The 1931 census showed 170,000 East Bengali immigrants in Goalpara (Mullan 1932). Additionally, there was significant growth of the "land

market", and by the 1930s, cultivated area had risen by a factor of four, from approximately 10,000 hectares to 45,000 hectares, and cultivable land was rapidly becoming scarce (Misra 2007a). Associated increases in land rents created conditions in which immigrant farmers, frequently involved in the lucrative jute economy were in a better position to afford such hikes and to become landowners themselves. Tribal farmers thus found themselves frequently ejected from productive land due to an inability to pay higher rents. Faced with the prospect of progressively scarce productive land to farm, they often ended up selling their land due to an inability to pay taxes.

4.4.6 The Rise of Tribal Ethno-nationalism

The colonial government actively constructed Assamese tribal identities through official discourse, promulgated policies, and everyday practices. The British commenced the laying of arbitrary geographic boundaries within colonial Assam (then part of the Bengal province) through a series of efforts that began with the Bengal Eastern Frontier Regulation of 1873 (Government of India 1915) that laid down an administrative "inner line" intended to control the mobility of both people and resources, and exert ever-increasing control over patterns of land use, while discursively positioning it as providing protection to tribal groups and their land from non-tribal communities. The legislation "cordoned off the hill areas" of colonial Assam, and was one of the early expressions of administrative policies that would contribute to the transformation of a fluid cultural continuum into hardened ethnic identities (Sharma 2011). In this case, an arbitrary spatial demarcation separated *hills* and *plains* tribes despite members of both

categories inhabiting either side of the imaginary *inner line*. Similarly, the temporary partition of the province of Bengal in 1905 was done along religious lines with East Bengal viewed as being primarily *Muslim* in composition and the western section as mainly *Hindu*, again with Bengalis of either religious faction residing in both subjectively created political spaces.

The crystallization of tribal and religious identities continued through the early decades of the twentieth century, largely driven by the emergence of a tribal middle-class intelligentsia educated in systems of western education. The reformist Bodo leader, Kalicharan Brahma submitted a memorandum on behalf of his community to the Indian Statutory (or 'Simon') Commission of 1930, constituted to investigate the effectiveness of the colonial Indian Constitution established by the Government of India Act of 1919. The memorandum submitted that the Bodos "have a distinct civilisation of their own" and therefore be given "a separate category…in the Census Report" (Ahmed 1929, 1), and that there should be designated political representation for the community in both and local and central (or national) levels of government. A similar document submitted by the Assam Kachari Jubok Sonmiloni (or 'Kachari Youth Association') to the Simon Commission, specifically stated that the Kachari community "does not bind itself to the chariot wheels of the big Hindu community but prefers to take its stand alone and independent of them and earnestly hopes that the Commission would be pleased to class them under a separate heading altogether" (Khakhlari 1928, 3).

The 1930s were a period during which tribal claims of cultural distinctiveness coalesced into a tribal identity, though initially it did not separate itself from being part

of a larger Assamese character. During consideration of the transfer of colonial Goalpara to the Bengal Province, Bodos, Garos, and Rabha tribals collectively expressed their desire to the Simon Commission to remain part of the Province of Assam (Das 1928). Elite intelligentsia of these and other tribal groups stoked the notion of a pan-tribal entity that resulted in self-identification as *plains tribes*, thus claiming distinctness from *hills tribes* and resulting in the formation of the All Assam Plains Tribal League (AAPTL) in 1933. In doing so, the AAPTL too, like the colonial administration, indulged in arbitrary coalescing and detachment of essentially fluid, interconnected, and related cultural entities. Members of *hill tribes* had and were continuing to inhabit the plains areas and vice versa. It utilized colonial discourse in general and the official language of the Government of India Act of 1935 that sought to portray tribal people as backward, uncivilized, primitive folk, to gain colonial support and protection (Pathak 2010). AAPTL leaders, however, continued to strategically push for tribal communities to be classified as *Hindu* to be part of a religion-based demographic collective to oppose the group that was increasingly being viewed as the primary immigration problem – East Bengali Muslims.

Immediately following Indian independence from colonial rule, pressure from the AAPTL contributed to the passage of a key legislation to further consolidate a politics of tribal ethnicity and identity through an overtly protectionist philosophy – the Assam Land and Revenue Regulation (Amendment) Act of 1947. It called for the "protection of backward classes" who due to their "primitive condition and lack of education or material advantages are incapable of looking after their welfare in so far as

such welfare depends upon their having sufficient land for their maintenance" (ALRRA 1947; pg. 1). It also called for the "constitution of compact areas, in regions predominantly peopled by the classes of people notified…into belts or blocks" (ibid; pg. 1). In doing so, it continued colonial era policy of fixing both ethnicity and territory, and explicitly connecting the two into circumscribed ethno-spatial enclaves (Baruah 2003). The term "plains tribes" was introduced into the legislation through a "state-government notification" in 1949 (Goswami 2014, 113), and in subsequent versions of the legislation, the relevant land areas were officially known as "tribal belts or blocks" (ALRRA 1990 edition; pg. 93). Loopholes, exceptions, key discretionary government power, and the influence of politicians, however, ensured access to non-tribal communities and to the public and private sector (Gohain 1997). A striking example was the de-notification of a tribal block in 1969 to enable the construction of Assam's capital city – Dispur.

At the national level, the postcolonial Indian State deemed all its citizens as equal under the Constitution and hence strove to provide for "special treatment of those thought to suffer from exploitation or discrimination" (Kapila 2008, 121). The Indian Constitution gave the GOI (through the President) the power to "specify the tribes or tribal communities or parts of or groups within tribes or tribal communities which shall for the purposes of this Constitution be deemed to be Scheduled Tribes in relation to that State or Union territory" (Article 342 in The Constitution of India 1949). Article 342 instituted a system of affirmative action (reservation of government jobs) and made special provisions for the development of STs. The term Scheduled Tribe (ST) was

henceforth legislatively instituted as the official term for a clear majority of tribal communities across the nation. Subsequently, the Constitution (Scheduled Tribes) Order of 1950 exercised the "powers conferred by…Article 342" and listed all the communities (including the "Boro-Borokachari") considered as STs with the caveat that they would be so considered only in "localities specified in relation to them." In doing so, the GOI explicitly related STs with circumscribed political land units and continued the colonial policy of attempting to restrict tribal groups to specific parcels of land. Article 342 of the Constitution allows for special provision for the educational and economic development of the Scheduled Castes and Scheduled Tribes, and for reserved jobs for them in central and state governments, as well as reserved seats in Parliament and provincial Legislative Assemblies.

Subsequent to India's gaining independence, the AAPTL disintegrated and it was not until 1967 that aspirations of the *plains tribes* of Assam manifested themselves in the formation of a political party known as the Plains Tribals Council of Assam (PTCA). The PTCA demanded the formation of a political area (specifically, a Union Territory) as separate from Assam, called Udayachal (George 1994). Another important civil society group that was formed in the same year as the PTCA was the All Bodo Students Union (ABSU). It was at this juncture of the overall history of the *plains tribes* that the Bodos began to dominate the political scene. Both the President and General Secretary of the PTCA were Bodo. While member tribal groups within the PTCA "did not as yet see the political interests of the Bodos as independent of other plains tribes of Assam" (Goswami 2014, 89), the ABSU was almost exclusively Bodo in its composition while

claiming to represent the interests of all the *plains tribes*. By the 1980s, the PTCA had progressively given up on Udayachal and this led to a split, with the ABSU withdrawing its support for the former in 1979, and a PTCA leader, Binai Khungur Basumatary (an ethnic Bodo) leading a split-away faction, the United Tribal Nationalists' Liberation Front that commenced working closely with the ABSU, heralding the dissolution of the PTCA.

The most recent phase of the quest for autonomy by the *plains tribes* commenced with the ascendancy of the dynamic Bodo leader, Upendra Nath (UN) Brahma, who became ABSU President in 1987. In the late 1970s and early 1980s, the ABSU and other tribal organizations had participated in the Assam Movement, which was the culmination of decades of anti-immigrant sentiment, with a focus on Muslim migrants from East Bengal (subsequently the nation of Bangladesh from 1971), that had continued to fester in post-independence Assam (Misra 2014). This political action was directed by the All Assam Students Union (AASU) whose leadership was primarily composed of socio-politically dominant *caste Hindus*, and it concluded with the signing of the Assam Accord in 1985. Subsequently the AASU leadership took political control of Assam, essentially sidelined their tribal partners, and were viewed as attempting to impose an Assamese linguistic hegemony on the latter while ignoring their socio-cultural aspirations (Goswami 2014). The ABSU under the leadership of Brahma, responded with an explicit demand for a separate state of Bodoland with Bodo as its official language and commenced what would be one of the most significant chapters in the

political history of Assam, ironically employing essentially the same political strategy as the AASU.

The ABSU under Brahma sidelined other tribal groups that composed both the earlier AATL and the subsequent PTCA and commenced with an explicitly Bodo-led movement demanding a separate state with Bodo as its official language. Though hitherto officially recognized by colonial historians and philologists as *Bodo-Kacharis*, thus including them within the broad *Kachari* ethnic denomination that included a number of culturally and linguistically related tribal groups (Hunter 1876; Gait 1906; Endle 1911), the ABSU had "renounced the Kachari appellation" by the 1980s due to it being viewed as a pejorative (Goswami 2014, 90). In doing so, they spearheaded the adoption of a self-realized identity that ultimately spawned two separate militant groups. The Bodo Security Force (later known as the National Democratic Front of Bodoland), formed in 1986, commenced agitating for a sovereign Bodo nation separate from India, whereas the Bodo Liberation Tigers Force (BLTF), constituted in 1996 struggled for a separate state within the Indian nation. The combined philosophies and practices of the ABSU, as well as the militant groups had significant outcomes for the Manas landscape. The morphing of the BLTF into the Bodoland People's Front (BPF) in 2001 and its subsequent ascendance to political power in 2003 in the form of the Bodoland Territorial Council (BTC) placed it at the helm of environmental governance within the Manas landscape.

4.5 RESULTS

4.5.1 Environmental Governance in the Manas Landscape

The abiding popular imaginary of Manas is centered on it being a WHS, a NP, and a TR; informants frequently referred these official designations during this research.

4.5.1.1 Manas as a World Heritage Site

The UNESCO World Heritage Center has, however, restricted its classification to a part of the core of Manas comprising approximately 391 sq. km., or the erstwhile Manas Wildlife Sanctuary. The WHC's rationale for not including approximately 110 sq. km. of the NP within the WHS was that it comprised "encroached areas" of "long-standing" that had been "converted to cropland" and hence did not add "any value to the current property"(IUCN 2017b, 19, 20). Therefore, the WHS classification was, and continues to be, even more stringent than the NP designation with regard to human occupation and use. Manas was formally classified as a WHS "in danger" in December of 1992, with the UNESCO citing two primary reasons for its decision – "encroachment by militants belonging to the Bodo tribe" and "illegal cultivation" (UNESCO 1992, 28). The 'in danger' label precipitated policies and practices of governing that influenced not just the WHS, but the entire Manas landscape.

With Manas (and the WHS) under the sway of a militant insurgency and with a near complete absence of the IFD, an anarchic decade commenced from the early 1990s that saw extensive and intensive timber extraction, uncontrolled hunting of a variety of wildlife species (importantly, the local extinction of the One-horned Rhinoceros), as well as widespread occupation of many sections of the reserve. A shift in the on-ground

situation commenced from 2003 with the dissolution of the BLTF, and the formation of the BPF at the helm of the BTC. The forest minister of the Council, Kampa Borgoyari, as well as other BTC politicians, in collaboration with key environmental NGO groups, oversaw ceremonial 'surrenders' of self-described 'poachers' in two public ceremonies that were widely covered by the media (Lakhotia 2005). These events were coordinated through the efforts of private entities (e.g. Help Tourism), civil society groups (e.g. the ABSU), environmental NGOs (e.g. the WTI), and the BTC. They were positioned as an example of how "the Bodos" have come to appreciate the need to "conserve the forests and wildlife to survive" and are "ready to create history of sorts with the first community-based eco-tourism project in the Northeast" (Lakhotia 2005), even though surrendering individuals belonged to a diversity of ethnic groups (Rehman 2008).

In a process that is unique to Manas, individuals who publicly pledged to change their unlawful land-use practices within the landscape, came to be variously known as 'forest protection groups' (FPGs), 'NGOs', 'ecotourism and social welfare societies', 'biodiversity conservation societies', or 'nature clubs' (Horwich et al. 2010). The key assumption underlying their establishment was that the knowledge and experience that made them effective poachers or illicit timber extractors could seamlessly enable their transition to becoming protectors of Manas. While a section of these groups possessed knowledge pertaining to natural resource extraction, not all members did. Former members of surrendered militant groups also joined FPG ranks, as well as young, local rural men. A variety of promises were made to the recruits, such as jobs in the IFD, economic benefits, and livelihood options from increased future tourism (as per key

informants). Correspondingly, many members, or 'volunteers' (*official term*) joined up with the hope that their volunteering would enable them to graduate to a permanent job, either with the forest department or some other government agency, and according to my data, very few (e.g. barely 1% for one FPG) of the volunteers have managed to get some type of permanent job stemming from the experience of working with such groups.

However, an important impetus (never mentioned by informants) for the formation of FPGs came from repeated concerns expressed by the WHC regarding "vacant positions within the Park" (UNESCO 2005, 17). WHC annual assessment reports for Manas foregrounded this issue as a "corrective measure" from 2005 to 2007 (UNESCO 2007). The 2008 report acknowledged the recruitment of volunteers as a step in the right direction, while identifying the stopgap nature of the initiative, and the need for it to ultimately lead to permanent hiring, as exemplified in the following quote:

> *"With more than 100 positions still vacant, the mission considered this recommendation not yet fully implemented and acknowledged the efforts by the park authorities and BTC to address this issue through the volunteer scheme it has set up in together with local NGO, but noted the need to make this staff increase sustainable by integrating the best volunteers within the permanent park staff" (UNESCO 2008, 33)*

The inception of FPGs in 2006 was heralded with considerable fanfare at an event headlined by Bodo political heavyweights, including the Deputy Chief of the BTC,

Kampa Borgoyary and Assam Legislative Assembly member, Chandan Brahma. Self-confessed poachers ceremoniously "surrendered" to politicians and government officials and were subsequently portrayed by various media sources as subsequently embarking on a new path in support of biodiversity conservation and environmental protection. Following the political fanfare, a total of 15-20 groups came into existence. Each of these groups was explicitly associated with a specific section of the Manas landscape and have since assumed a diversity of roles pertaining to the overall management of the MTR. This includes conducting forest patrols and assisting wildlife researchers, as well as documentary filmmakers.

The most frequent activity that FPGs have been and are currently involved with is conducting forest patrols. The space for such participation was created as a result of the direct impact of the Bodo militancy on the IFD. Violent attacks and extensive destruction of department infrastructure by Bodo militants precipitated an exodus of IFD staff from Manas. The reluctance of field personnel to venture into the forest continues to this day. In the words of FPG informant #3:

> *"One thing I will say is that in around 7 years of doing this work, not once has the forest department taken the initiative in conducting a patrol, not once have I been told by even a single forest department staff that it's time for work. What always happens is that we have to go to the range office and get hold of the forest department staff to accompany us…we literally have to force them to come. Even to this day, they are like "Okay, if you want to go to the forest, let's go"."*

Furthermore, IFD field offices tend to be understaffed and under-funded, thus limiting the department's effectiveness in covering the area under its authority. Though the FPGs initially began conducting patrolling operations on their own, they soon realized their key limitation of not being backed by official authority. For example, if they apprehended an individual illegally felling timber, they could not make an arrest. Subsequently, a few (usually 1-3) IFD staff began accompanying FPG patrols, though in numerical terms, ongoing patrolling is predominantly an FPG affair.

Since their establishment, FPGs have been supported by funding from the BTC. This includes a nominal stipend as well as money for purchase of rations; the total amount assigned to a given group depends on the number of volunteers. A small percentage of the total amount is set aside for administrative expenses. The disbursement of such funding is not conducted in a set, regularized manner and funds may arrive every 2-3 months or even just once annually. The amount of funding can vary capriciously since its source is the annual budgetary allocation to the BTC, a pot of money that is largely controlled by both the central government and the Assam state government. Additionally, the 'Forest Sector' routinely is of low priority with regard to overall resource allocation within the Council. As a result, FPGs have been frequently financially strapped since their inception. As journalist informant #2 described it,

> *"It is just utilization of funds. The funds are channeled through the BTC, that's all. Otherwise there is nothing in the BTC. You cannot do anything…even for a*

4th grade employee, you have to write to the state government and the state government will say okay, you can have it. Otherwise you cannot do anything. BTC is only there for the utilization of funds."

Even the monthly sanctions for food rations are not handed over to each volunteer but are overseen as a collective pot of money by senior members of the groups. The accounting of expenses is rarely an open process and FPG informants expressed dissatisfaction at the lack of transparency and complained about possible financial mismanagement by their superiors within the FPG hierarchy. For example, an informant described a time when his group was contracted by a research project and the volunteers assisted in related field work. The stipend that was promised to each volunteer after the completion of the project was not delivered in a timely manner. When they complained, disciplinary action was initiated against them for voicing their grievances. Since the BTC funds FPGs in an informal, unfixed, and irregular manner, the volunteers are subject to severe financial instability.

An absence of secure, timely funding has resulted in considerable institutional instability for the FPGs. Furthermore, it is not unusual for a given FPG to get financial support for just half (or even less) of its membership. This has in turn created the space for members to explore alternative sources of funding to obtain sufficient funds to meet daily administrative and maintenance needs. Accordingly, certain FPGs have entered into an arrangement with FD staff through which seized bullock carts are returned to owners after the payment of an agreed-upon fine which is then shared between the two

entities. The levying of such fines is not legally sanctioned. An FPG informant attempted to portray it as largely to give local people a chance to change their behavior by giving them a sort of warning because the alternative would be for them to go to jail and the cart to be auctioned off by the IFD. As one informant put it, "What we do is that when we catch someone from the first time, he gets a warning but has to pay a fine, since I'm a local person and…have to live in this area, and have to live with the public."

Not all the groups that pledged to renounce resource extraction have been awarded funding by the BTC and are active as FPGs. In a meeting with one such group, the members acknowledged an initial receipt of money from the Deputy Chief of the BTC, Kampa Borgoyari – "When we surrendered, there was Kampa and they gave us INR 10,000 each, but that is not enough." Whereas they were active as a FPG for less than a year, they subsequently ceased doing their duties and came out of the forest. The reason for this was described by one member:

> *"For the 8 months that we were there, we had 8 months of regular rations but there was no salary...even to buy oil or salt. In the end, they stopped giving us even the ration. We had to obtain stuff on credit and in the end, we had to collect money to pay off the debt. After that we all decided that we will not stay there so we came out."*

They described their being subsequently sidelined by the IFD who, they allege, "appointed other people by taking bribes. Those people who got jobs by giving bribes,

are taking money and giving opportunities to timber smugglers to take out wood." An overall paucity of livelihood options and a feeling of being let down by the BTC has led them to seriously reconsider commencing hunting again. As one of them said "If we don't get anything to eat, we will destroy Manas."

In addition to the establishment of FPGs in response to WHC demands, relevant efforts and actions of key stakeholders, specifically the IFD, environmental NGOs, as well as the BTC were a clear response to requirements by the WHC for lifting the 'in danger' label for Manas. The 2011 WHC report that recommended the removal of Manas from the "List of World Heritage in Danger" explicitly states its satisfaction with relevant steps taken by stakeholder.

> *"The State Party reports that there are now more permanent forest staff than sanctioned posts, with an almost equal number of positions filled by different categories of manpower, paid and unpaid. The mission considers that this corrective measure has been fully implemented" (UNESCO 2011, 35)*

There is virtually no evidence to indicate that the WHC attempted to evaluate the "different categories of manpower" that enabled the State to address Manas' long-standing staffing problem. For example, none of the post-2011 UNESCO assessments document any manner of follow-up by the WHC to evaluate the sustainability of staff increases through integration of the "best volunteers within the permanent park staff". A detailed assessment of one FPG by this researcher revealed that only a single individual

from among a total of forty volunteers is currently serving in a position associated with biodiversity conservation, and that too at another national park in Assam. Twenty-two volunteers (55%) have since left the said group and are currently involved primarily in agriculture as a means of livelihood production.

Another key focus of WHC reports on the status of Manas is on the issue of illegal occupation of land or 'encroachment'. The 2014 annual WHC document expressed concern "regarding new encroachment on the property in its eastern Bhuyanpara range, as well as in parts of the Manas Beki river system" (UNESCO 2014, 107) and clearly stated that the situation "could create the conditions to re-inscribe the property on the List of World Heritage in Danger" (ibid., 108). The official Manas governance apparatus demonstrated clear recognition of the significance of this issue for the WHC in its 'State of Conservation Report by State Parties' (henceforth 'State Report') submitted in 2015. The document detailed a comprehensive plan with a "tentative timeline", expecting eviction of encroaching households to commence February 2015 (Government of India 2015). The subsequent State Report of 2016 acknowledged that that planned eviction was not conducted, but that it was planned for "the last week of November/1st week of December, 2016" (Government of India 2016, 7). The WHC status report of 2017 announced a 'peaceful' eviction operation that was "carried out on 22 December 2016 in Bhuyanpara Range, clearing some 1,600 hectares of encroachment" (UNESCO 2017c, 65). However, recent media reports have announced that "the encroachers have returned, derailing the process" (Goswami 2017).

In a recent evaluation, the IUCN reiterates the WHC's long-standing non-recognition of the areas that were added to the Manas wildlife sanctuary in 1990 when it was upgraded to a national park, stating that these are "encroached areas" of "long-standing", except for Bhuyapara where occupation is considered relatively recent. Hence, the both the UNESCO and IUCN have always referred to the WHS as the 'Manas Wildlife Sanctuary'. A proposal to increase the land area of the WHS site by adding on the Manas Reserved Forest (360 sq. km.) was formally introduced to the WHC in 2011, received formal approval by the Assam Board of Wildlife in 2014, and the land transfer was finalized in August of 2016 (Government of India 2016). Data collected by this researcher through household surveys, participant observation, key interviews, and many informal/casual observations suggest extensive and intensive tree extraction for both timber and fuelwood from this proposed addition to the MNP. Of three 'State Reports' submitted thus far to the WHC, only one (2015) has mention of fuelwood collection, specifically pertaining to the planned eviction from areas occupied within the national park.

> *"All access to forest, including grazing of livestock, collection of firewood and minor forest produce, fishing and hunting to be strictly banned and the law enforced through strictest of measures." (p. 45)*

4.5.1.2 Manas as a National Park

The Indian State currently recognizes an area of approximately 860 sq. km. of Manas as a NP. Despite a recent expansion of the geographic extent of the NP from 500 to 860 sq. km. (August 2016), it only comprises approximately thirty percent of the entire Manas landscape. The section of Manas that lies outside of the designated WHS, forms not only the majority of the TR, but provides much of the landscape connectivity that wildlife species utilize to access contiguous habitat, both north into Bhutan (Royal Manas NP), as well as west into West Bengal (Buxa Tiger Reserve). The near-perfect overlap of the WHS and the NP with regard to their i) geographic limits, as well as their ii) governance imperative of preserving 'natural heritage' through complete exclusion of human presence and use, results in virtually indistinguishable governance practices.

4.5.1.3 Manas as a Tiger Reserve

Manas was one of the first of nine areas to receive a formal designation through the Project Tiger initiative in 1973. An expanse of 2831 sq. km. was established as a TR, with the Manas Wildlife Sanctuary (391 sq. km.) as its core. A census conducted in 2002 based on the 'pugmark technique' yielded a figure of 65 tigers, though the reliability of this method has since been found to be "flawed", resulting in it being discontinued (Karanth 2015). A subsequent census completed in 2007 utilizing camera trap technology, a method universally considered as a more robust technique to assess tiger populations, yielded a relatively low count of 4 individuals within the NP area (Das et al. 2007). The most recent iteration of the 2007 exercise completed in 2015, resulted in the identification of 14 individuals within the NP (Bora 2016). It is noteworthy that a

majority of these observations were made in areas with human settlement and agricultural production (IUCN 2017b). Tiger poaching is an ongoing concern in Manas (Mitral 2016).

4.5.1.4 Manas as a Biosphere Reserve

Manas was assigned 'Biosphere Reserve' status in 1989, and continues to be a national-level BR. In one of the most comprehensive reports on the area, evocatively titled 'Bringing back Manas', published by a key environmental NGO operating within the landscape (the Wildlife Trust of India [WTI]), the word biosphere is mentioned once (p. 30), and without specific reference to Manas (Menon et al. 2008). In another article highlighting his organization's involvement with Manas, WTI's Executive Director and CEO, Vivek Menon proposes "tripling the size of the Protected Area through an innovative community-led declaration for 'Greater Manas' and the subsequent training and equipping of the entire staff to curb poaching" (Menon 2012). WTI's proposed expansion of Manas into an envisioned 'Greater Manas' essentially involves the incorporation of two areas of "existing reserve forests and thus their upgradation into a wildlife sanctuary" (Menon et al. 2008, 87). What the report fails to point out is that the two large areas of reserved forest in question are already included within the MTR, as well as the Manas BR. Since Indian 'wildlife sanctuary', 'tiger reserve', and 'reserved forest' designations roughly correspond to the IUCN's 'Category IV protected area' (IUCN 2017c), the WTI proposal veers towards needless duplication. Furthermore, Menon's emphasis on an "innovative community-led" effort aligns better with the 'biosphere reserve' concept and its associated IUCN protected area label – 'Category

VI'. Category VI allows for the conservation of "ecosystems and habitats, together with associated cultural values and traditional natural resource management systems" (UNESCO 2017a).

A report on the monitoring of the tiger population as well as "capacity building of local stakeholders" within the NP published by another influential Assam-based environmental NGO, Aaranyak, does not have any mention of the fact that the national park forms the core of a biosphere reserve (Das et al. 2007). Peer-reviewed publications with Aaranyak staff involvement make no mention of the applicable BR category (Sarma et al. 2008; Takahata et al. 2010; Nath and Machary 2015; Nath et al. 2015). However, a more recent non-peer-reviewed publication involving some of the same Aaranyak staff did indicate the BR status of Manas, and identified the national park as the BR's core (Das et al. 2014).

In contrast, a set of peer-reviewed publications that have regularly invoked Manas' BR status are by the late Robert Horwich (of the 'Community Conservation' NGO) and Arnab Bose (of the 'Nature's Foster' NGO). While the notion of 'community-based natural resource management' (CBNRM) was central to their research and writings, the authors did not attempt a critical engagement with the only PA status that explicitly and comprehensively engages with the idea of CBNRM – the biosphere reserve (Horwich et al. 2010; Horwich, Das, and Bose 2013). They even conflated the concepts of WHS and BR by referring to "the listing of the Manas Biosphere Reserve by UNESCO in 1992 as a world heritage site 'in danger'" (Allendorf et al. 2013, 427).

Results from an analysis of detailed interviews with seven FD officials demonstrated a very limited understanding of and engagement with the concept of the Biosphere Reserve. Five interviewees did not even mention the term BR, whereas of the two informants who did so during the interview, only one attempted a critical engagement with it, while misstating the year that Manas was conferred with the status by almost a decade thus:

> ***IFD respondent #5:*** ***"****Manas biosphere was declared in 1998 [sic] and it was initiated by somebody but came into being 1998 [sic]. So, it definitely started from the national park. The field director has control over the NP but not over the buffer areas. So, ideas did not percolate to the buffer areas. It was a mistake of the officer who was sitting here. See, schemes or rather annual plan of operation was made for the national park only…not for other areas…see the idea of having a biosphere reserve did not percolate to the adjoining areas. Basically, it should have been taken up in the fringe areas…I mean the buffer areas, but it remained confined to the NP only"*

The informant's discourse clearly highlights the overwhelming managerial focus on the MNP, or the core of the BR.

4.5.2 An Unquiet and Violent Countryside

The rise of the Bodoland Movement through the ascendancy of its civil society institution, the ABSU, under the leadership of UN Brahma in 1987, as well as the simultaneous rise of the militant Bodo Security Force (BdSF) had significant outcomes for the MTR. Taking several pages out of the *AASU-Assam Movement* playbook, the Bodoland Movement foregrounded the issues of i) illegal immigrants in what they consider their indigenous homeland, ii) illegal occupation of *tribal BoBs* by non-tribal communities, iii) the linguistic and socio-cultural domination of the *caste Hindu* community over tribal groups, as well as iv) an overall dearth of development in the districts of Assam with significant Bodo populations. The on-the-ground practices of the ABSU, militants, and the Bodo community within the Manas landscape had significant outcomes for the associated RFs through Bodo resistance to the IFD rooted in a history of contestation with authority, both colonial and postcolonial, over forest land and associated resources, and mediated by an assertive, self-realized, ethno-nationalist identity.

4.5.2.1 The *Illegal* Bangladeshi

The interaction of policies that encouraged wasteland colonization through a focus on agricultural expansion and cash-crop production created the political and geographic space for the facilitated immigration of thousands of land-hungry, mainly Muslim farmers in the early decades of the twentieth century (*see Table 4.1*). The 1891 census showed Muslims as being 27.5% of the population of Goalpara whereas by the 1931 census, that figure had increased to 43.9% which was slightly higher than the

percentage of the population that was Hindu (43.7%) (Mullan 1932). In the following decade, which saw India gain independence from colonial rule, also witnessed the splitting away of East Bengal as East Pakistan in 1947. The lead-up to this partition in the late 1930s and early 1940s was a contentious period characterized by religion-based politics driven by two major political parties. The Muslim League attempted to facilitate additional immigration from East Bengal to Assam and the Indian National Congress worked to oppose such colonization (Misra 2014). The latter ultimately prevailed, though there was a significant influx of refugees into Assam following partition in 1947. The changing demography of Assam in the first half of the twentieth century became the context for suspicion of and hostility towards the 'illegal foreigner' and helped create protectionist enclaves through the Sixth Schedule of the Constitution of independent India (Ministry of Law and Justice) for *hill tribes,* though not initially for the *plains tribes*.

Decadal population figures published for Assam from 1901 to 2011 demonstrate population spikes in in the first two decades of the twentieth century in all four districts (Goalpara, Dhubri, Kokrajhar, Chirang) that formed colonial Goalpara. Similar upticks were recorded again in the two decades before East Pakistan achieved independence from Pakistan in 1971 resulting in the sovereign nation of Bangladesh (Choudhury 1971). Like the Assam Movement, the Bodoland Movement made the Muslim or *Bangladeshi* a key focus, and in doing so did not distinguish between people of East Bengali origin whose ancestors migrated into Assam i) in the early three decades of the twentieth century, ii) around the time of independence from colonial rule in 1947, iii)

around the time of the formation of Bangladesh, and iv) subsequent to 1971. Hence, Bengali Muslims as an ethnic group have become politically convenient proxies for illegal immigrants from Bangladesh. A recent analysis to evaluate the extent to which "the change in the Muslim and non-Muslim parts of Assam's population was due to migration and reproduction, respectively" found that for the state of Assam, net immigration between 1971 and 2011 was "virtually zero" (Borooah 2013, 47, 48). Furthermore, it found that a bulk of Muslim immigration into Assam took place in the first half of the 20th century.

Table 4.1: Decadal variations in census populations for Assam, Kokrajhar and Chirang (1901-2011) [Source: (Government of India 2017a)]

YEAR	***ASSAM***		***KOKRAJHAR***		***CHIRANG***	
	Population	*Decadal increase (%)*	*Population*	*Decadal increase (%)*	*Population*	*Decadal increase (%)*
1901	3,289,680		79,378		37,523	
1911	3,848,617	**+16.99**	103,171	**+29.97**	48,731	**+29.87**
1921	4,636,980	**+20.48**	130,947	**+26.92**	61,885	**+26.99**
1931	5,560,371	+19.91	151,581	+15.76	71,977	+16.31
1941	6,694,790	+20.40	174,060	+14.83	82,972	+15.28
1951	8,028,856	+19.93	190,164	+9.25	90,797	+9.43

Table 4.1 continued

YEAR	***ASSAM***		***KOKRAJHAR***		***CHIRANG***	
	Population	*Decadal increase (%)*	*Population*	*Decadal increase (%)*	*Population*	*Decadal increase (%)*
1961	10,837,329	**+34.98**	270,930	**+42.47**	165,829	**+82.64**
1971	14,625,152	**+34.95**	416,996	**+53.91**	247,085	**+49.00**
1981	No Census	-	No Census	-	No Census	-
1991	22,414,322	**+53.26***	744,609	**+78.57***	437,288	**+76.98***
2001	26,655,528	+18.92	843,243	+13.25	433,061	-0.97
2011	31,205,576	+17.07	887,142	+5.21	482,162	+11.34

* Bi-decadal percentage increase (in absence of 1981 census data)

Inconsistencies with regards to what constitutes an illegal foreigner persist even within Bodo civil society groups. For example:

> ***ABSU respondent #1:*** *"In the Bodoland Territorial Council Act, in the section on land, it's written that those who have been here before Feb 10, 2003 as bonafide citizens, have the right to remain here…. if they were illegally given land, then that is a thing of the past."*

ABSU respondent #2*: "The AASU demands and the signing of the accord between the AASU and the state government in 1985 was based on the National Register of Citizens of 1971. The AASU agitation was based on the demand that foreigners have to be expelled; those who have come from Bangladesh and Bengal. Though their baseline is 1971, ours is 1951. The latter would result in a complete clearing of all illegal occupants."*

Inconsistencies notwithstanding, the general conceptualization of Muslims as illicit interlopers contributed to episodes of violent conflict with Bodos after the commencement of a heightened Bodoland movement led by the ABSU under UN Brahma. While continuing to profess its credentials as a political organization that utilized solely peaceful methods in attempting to achieve its goals, the ABSU was "rather tolerant of much of the violence" that was subsequently unleashed by both the Bodo Volunteer Force (BVF), an armed faction of the ABSU, as well as the militant BdSF (Baruah 1999, 194). Fleeting respite from political chaos in the form of the Bodoland Autonomous Council (BAC) Accord of 1993 collapsed under the weight of mounting ethnic tensions, and the disbanded BVF reappeared in the form of a reconstituted militant group, the BLTF in 1996. The BdSF renamed itself the National Democratic Front of Bodoland (NDFB) in 1994, and along with the BLTF commenced an era of intense violence and political uncertainty that included conflict with the Muslim community, as well as between the two militant groups that claimed hundreds of lives (Goswami 2014). Clashes between the two communities in 1993 and 1994 resulted

in scores of deaths and the displacement of thousands of Muslims, as well as Bodos (Dutta 2016). Whereas a minority of displaced Muslims have returned to their pre-conflict lands, thousands continue to reside in squalid refugee camps, or in newly formed villages with a fraction of their erstwhile landholdings (Misra 2014; personal observation).

4.5.2.2 The *Encroaching* Adivasi

The Adivasis of Assam are descendants of a mix of several tribes (e.g. Khond, Oraon, Munda, Santhal) whose members were brought into modern-day Assam as indentured laborers for the production of tea and timber in the second half of the nineteenth century. An inability to procure adequate local labor to work tea plantations, conduct forestry operations, and clear wastelands for permanent cultivation provided the political and economic impetus to import Adivasi manpower from various parts of the current Indian states of Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Orissa, and West Bengal, through a process of directed immigration overseen by the colonial State (Gohain 2007; Misra 2007a; Sharma 2009; Behal 2010, 2014). In his account of the Bodos, the colonial historian William Hunter described them as being "very independent, and decline to work as coolies or day-labourers. In consequence of this, it is very difficult for the public officers to obtain labourers in times when urgently wanted…" (Hunter 1879, 52).

Colonial characterizations of Adivasis as "simple industrious people", combined with "the cheapness of labour in their country, partly on account of their tractable disposition" made them "much sought after and highly prized as labourers" (Campbell

1866, 34). Approximately 750,000 indentured laborers were imported into colonial Assam in the last three decades of the nineteenth century. Brutal work conditions on tea plantations that included physical violence, economic coercion, socio-cultural marginalization, and the collusion of the colonial State with tea estate management led to "mortality and desertion" (Behal 2010, 37). Existing work conditions led Adivasi labor to actively "abscond" and though some of these "deserters" did return to their lands of origin, many stayed on in Assam (Behal 2014). Furthermore, those whose indenture contracts had expired elected to stay on partly due to "the possibility of obtaining rice-land to cultivate" (Sharma 2009, 1317).

The early history of forest governance in colonial Goalpara is similarly replete with references to the problems faced by the ImFD in procuring labor for a multitude of forestry-related tasks crucial to effective management (e.g. Mann 1885; McKee 1892). By the first decade of the twentieth century, the ImFD had instituted a policy of setting up *forest villages* (FVs) within RFs through the allotment of subsistence land, grazing rights, reduced land rent, as well as collection of a diversity of forest products within RFs in exchange for a fixed number of days of labor in each annual cycle (Carr 1902). In Goalpara, it even constituted a tract of forest land with few trees of timber value as a RF (the Kachugaon RF) in 1902, specifically for the establishment of FVs (Jacob 1939). As in the tea plantations, Adivasis were imported as a response to the forest labor deficit. Adivasi households soon became the mainstay of forest villages in colonial Goalpara, and ImFD records from the early 1930s show Adivasis as forming approximately 55% of the population of all the forest villages within western part of the district (Bor 1931).

The first formally reported incident of Bodo-Adivasi conflict occurred in 1996 in which the "NDFB massacred over 250 Adivasis mostly in Kokrajhar district and burnt down scores of villages" resulting over 2 lakhs refugees (Bora 2014). Sporadic killings of Adivasis continued into 2002 and the violence took an overall death toll of more than 800 and left approximately a quarter of a million homeless (Bhaumik 2007). Most Adivasi refugees were reluctant to their lands for fear of additional violence and instead chose to clear RF land to establish new villages (personal interviews). The conflict between Bodos and Adivasis is noteworthy, given a long history of coexistence which was described by multiple informants.

> ***ABSU respondent #1****: "Now with regard to the Adivasis, why they had a conflict with Bodos in 1996 is not clear to this day…the Adivasis and Bodos live so closely with each other that there is no chance of conflict…this conflict only comes from upper political levels and not at the level of community."*

> ***Journalist respondent #1****: "There is a nearby Adivasi village called Amraguri which is located in a predominantly Rajbanshi area and the Adivasis have adopted Rajbanshi manner of clothing and dressing. Rajbanshis and Bodos have similar clothing styles and designs. Furthermore, there has been cultural exchange in the sense of inter-marriage between Rajbanshis and Adivasis, and even between Bodos and Adivasis."*

Ethnically diverse villages that included Adivasis, tribal and non-tribal Assamese, Nepalis, as well as East Bengalis living in relative socio-cultural harmony have been a relatively common reality through twentieth century Assam (Sharma 2009).

4.5.2.3 Coercive Demographic Change

Bodo conflict with Muslims and Adivasis, as well as violent clashes between the BLTF and NDFB created a political situation that put enough pressure on the GOI to seek resolution. Accordingly, on February 10, 2003, a Memorandum of Settlement was signed between the BLTF, the Assam Government, and the GOI that came to be known as the Bodoland Territorial Council (BTC) Accord. Whereas the BLTF and the ABSU agreed to drop their demand for a separate Bodo state, the NDFB did not support the agreement and continued with its demand for a sovereign Bodo nation. The BLTF subsequently changed its appellation to the Bodoland People's Front (BPF). The BTC Accord was made possible through an Amendment to the Sixth Schedule of the Indian Constitution and allowed for the creation of the Bodoland Territorial District (BTAD or Bodoland) which includes the districts of Kokrajhar, Chirang, Baksa, and Udalguri, to be administered by a quasi-governmental Bodoland Territorial Council. The BTC has administrative control over a majority of the administrative departments assigned to any state government in India.

The Accord gave disproportionate political power to the Bodo community despite the fact that it does not enjoy a demographic majority within the BTAD. Of the 40 BTC seats, 30 (75%) are reserved for STs (Memo of Settlement 2003; Para 4, Provision 2), and Bodos have controlled virtually all of those positions since they form

approximately 85% of the ST population of the BTAD, but only about 29% of its entire population (Government of India 2017a). The BTC Accord also gave the Bodos the power to override demographic realities. At the time of the signing of the BTC Accord, of the 3082 villages included within the BTAD, it was to-be-determined whether Bodos had demographic majority within 95 of them ((Memo of Settlement 2003; Para 3, Provision 2). Muslims have since claimed that Bodos do not make up the majority population in approximately 600 villages in Bodoland (Choudhury 2014b).

Ethnic conflict has continued since the signing of the BTC Accord. The victims of such violence have predominantly been members of the Adivasi and Muslim communities, resulting in scores of fatalities and large-scale population displacement. In the words of political scientist Sanjib Baruah, "intended or not, these ethnic riots appear to have an ethnic cleansing function" and that "at least to some Bodo activists, ethnically targeted violence seemed to hold the promise of changing the demographic facts on the ground, which they have been told repeatedly stand in the way of a separate Bodoland" (Baruah 1999, 196). He goes on to cite media reports documenting the reluctance of Adivasis, displaced by such incidents, to return to their erstwhile homes and land for fear of being attacked again. During the course of this research, informants recounted instances of Bodo occupation of Adivasi land following conflict between the two communities.

NGO respondent #6 (Adivasi): *"I can show you the area which used to be occupied by Adivasis but today is in the hands of Bodos. Even the patta land…forget about the forest land. Even those are in the hands of Bodos."*

4.5.3 Ethno-nationalism, Ethnic Conflict, and Occupation of Forest Lands

The commencement of the Bodoland Movement marked the commencement of widespread and intensive clearing of RF lands. While ABSU informants positioned their organization as having a forest preservation policy from the outset, and implicating militant groups in deforestation in the RFs of the MTR, other interviewees recalled the commencement of forest clearing with the rise of the ABSU-led Bodoland Movement in the late 1980s.

IFD respondent #5: *"These practices started much before the BLTF came into existence. First this agitation was run by ABSU. They had a volunteer force and it is this force that is responsible for starting it initially. Later on came the BLTF. The BLTF is an offshoot of ABSU. The ABSU created it. Then one could see truckloads of timber moving towards West Bengal during the agitation. The timber used to reach Delhi, even Mumbai also, Haryana, Punjab."*

The 1990s were a period of intense conflict between Bodo militants and the IFD marked by killings and kidnappings of IFD personnel as well as widespread destruction

of IFD infrastructure (Horwich, Das, and Bose 2013). IFD informants described this period in graphic detail.

> ***IFD respondent #2:*** *"The violence and agitation started in 1989 or maybe 1990-91. During the Bodo agitation, a lot of forest department officers had to come out from interior areas. Most of our Beat and Range offices were burned down. Some of the officers were also killed, they were kidnapped, and at one point of time even the state government had to issue an instruction to the forest department to pull out its staff for the safety of their life. So, that was the situation. When we came out, what do you think happened to the forest?"*

> ***IFD respondent #5:*** *"The forest department was a silent spectator. They did whatever they could…if they could not, they remained silent. But virtually it became static and choking for us. I was very new at that time and was not involved with the territorial kind of activities but only in social forestry…plantations and creation of nurseries….and whatever government schemes come. But the condition of the territorial DFOs (Divisional Forest Officers) was worse. They could do nothing in fact. Even sometimes they were forced to put their signatures wherever they were told to. I heard many trucks went after signed approval from them but they had to put the signature by force. There was no way out. See there were so many bomb blast cases that took place. Who will take the responsibility? Even army personnel and Assam police became*

casualties. Everywhere! It was like that for a long period of time…it started in 1984 and then in 1993 it almost stopped but started again."

After a brief lull following the signing of the BAC Accord in 1993, the Bodoland Movement started anew with the formation of the BLTF and a resumption of clearing of RF land as well as the illegal extraction of tree species of timber value. Land-hungry Bodo and Adivasi farmers seized the opportunity and moved into RFs, enabled by the virtual absence of FD personnel.

FD respondent #2: *"The agitation for a separate Bodoland started in 1989. It became very violent and we also started withdrawing from the forest area and large-scale encroachment started."*

Academic respondent #1: *"During the movement, the forest was cut extensively and was cleared away. People needed money…easy money but the people who became rich were probably outsiders who…the Bodos and Adivasis were just cutting and giving it away. Huge Sal trees used to be very cheap."*

Militant groups used the sale of valuable trees that were felled during land occupation to fund their operations.

Adivasi respondent: *"This is what they were doing…you cut down the trees, you take the land and you give the timber to us. And then militants would take the timber and sell it in Bengal. Timber was being transported across the border into Bengal, day and night. The militants had a simple arrangement with local people – you take the land, give us the timber. They did not need to get any labor because people were cutting trees down, because everybody wants to acquire more land. The BLTF built their castles after selling the timber (chuckles). Now slowly what happened is that there were big, big timber contractors in Gossaigaon…the ones that BLTF was associated with."*

However, ethnic tensions brewing in a landscape awash with militancy, illegal arms, and ongoing violence let to conflict and violence, resulting in large scale loss of lives and massive levels of displacement. A reluctance or inability to return to previously occupied land following ethnic conflict was frequently associated with land occupation within the MTR. With paucity of the availability of cultivable land south of the Reserve, Bodos and Adivasis commenced occupying extensive tracts within associated RFs. The FD labeled such practice as 'encroachment', and of the 94 households occupying encroached land within the MTR, 76 (81%) were Bodo and Adivasi. 48% of all Bodo households surveyed occupied encroached land, and 72% of all Adivasi households covered did so as well.

IFD respondent #2 (on post-conflict RF land occupation by Adivasis)*:*

"Actually they were all in relief camps which were made after the 94-95 riots. 70-80% of them are forest villagers…no doubt about it. They were occupying their own villages and after the riots, they went to the relief camp in Sanpkata…there was a big camp there. From Sanpkata, once they stopped getting any relief and their population also increased and multiplied and some pressure was there from local communities to leave the area. So, they somehow went and occupied the Jawarbil part which is within the Ripu RF, and they settled in a huge expanse of land."

In an area (the BTAD) where the percentage of the rural population has not changed appreciably since 1931 (over 90%) and where land is the only asset and the only feasible and sustainable source of livelihood production due to an overall lack of viable options, RF occupation represents one of the extremely few sources of overall economic risk management. A growing land market in the BTAD that forces poor Bodo and Adivasi farmers to sell land at throw-away prices to service indebtedness to a growing population of tribal elite, flush with funds available through GOI allocations to the BTC, subsequently forces the former into clearing and occupying RF land (Goswami 2014). Local politicians back such land incursions and frequently buffer encroachers from potential FD action (personal observation).

IFD respondent #1 (on loss of RF land in the Kokrajhar District): *"It's true in the sense that the area has reduced. For example, Haltugaon contains the*

Chirang RF which is almost 600 sq. km. Within that, almost 170 sq. km. is encroached or degraded."

IFD respondent #2 (on loss of RF land in the Chirang District): *"It is simply land…land is scarce. During the riots and displacements, a lot of Bodo families might be feeling threatened to stay along with the Muslim communities so they want a safer area to go to. So, one or two families may have shifted…not all of them, but now what you are seeing maybe 30-40 times the number that might have moved initially. Things went on like this…families multiplied so they occupied more land…so on and so forth. Sisubari and Khatribari RFs are also gone. You can see that the Kuklung RF is entirely gone. We lost it in the 1980s. The Bengtol RF is gone…it was lost way back in 1975-76. So, at that time there was some kind of communal riots like we are having right now between the Muslims and the Bodos. So, during that time lot of displacement happened and finally Bodos were settled in the Bengtol area, so the entire RF was…some proposal was mooted that it should be de-reserved back in the 1980s…the proposals kept coming but nothing happened."*

Whereas the presence of non-tribal communities on land within the BTAD is frequently portrayed by Bodo civil society and public as illegal occupation of BoBs, what is frequently omitted from such discourse is that such land transfers have historically been enabled through the voluntary sale of land by Bodos to non-tribal

settlers (Goswami 2014). Such land transactions are largely informal in nature and are followed by Bodos moving into RF land. Interestingly, Adivasi incursions into RF land through similar processes has collided with Bodo territorial hegemony. Forest land occupation by the former is frequently characterized by the latter as encroachment, even though Bodos themselves occupy significant amounts of RF land. Violent attacks by armed members of the NDFB (Songbijit faction) on Adivasi villages in multiple BTAD locations in the final week of December 2013 (Talukdar 2014) were justified by an ex-militant respondent thus:

> ***Militant respondent #2:*** *"How deep inside the forest land they are encroaching…these Adivasis. And where is the forest department? Why the Adivasis who are from Jharkhand, Chhatisgarh, Bihar, can come and just encroach here? We cannot go to Bihar and encroach the forest land. The government will naturally take some actions, but here nobody cares."*

Like the widespread expansive consolidation and subsequent positioning of Muslims of Bengali descent in Assam as interloping Bangladeshis, the above statement utilized a similar discursive technique to posit Adivasis simultaneously as people who do not belong, as well as selectively labeling the very land use practices that Bodos widely employ, as illegal when conducted by the discursive 'other'. Adivasi communities in Assam are frequently considered STs in their sites of origin but have not been able to

secure the category in Assam, despite decades of ongoing agitation and with continuing opposition from various tribal communities, including the Bodos (Misra 2007a).

My own field research was conducted during multiple incidents of violent ethnic conflict. The duration of my preliminary survey in the summer of 2012 was cut in half by the outbreak of widespread violence between Bodos and Muslims. During a subsequent visit to the core area of the Tiger Reserve in May 2014, I was witness to the aftermath of a brutal attack by Bodo militants armed with assault weapons on the predominantly-Muslim-inhabited Narayanguri village. This village was located on the fringe of the protected area, on the western bank of the Beki River that forms the western boundary of the NP. The attackers mowed down women and children and set fire to every single habitation (Siddique 2014). I vividly recall standing on the opposite bank of the Beki River watching huts ablaze against an orange sunset, an elephant herd with a majestic tusked bull in attendance grazing behind me. I was subsequently confined for three days in a tourist lodge, surrounded by deployed security forces, as irate villagers, suspecting the involvement of members of the IFD in the Narayanguri attack, assaulted a forest range office located adjacent to the lodge, resulting in the IFD personnel having to shoot rounds into the air to disperse the mob. I was finally smuggled out in a government vehicle to the nearest railway station, driven through an eerily quiet countryside, devoid of the usual hub-bub of Assamese rural life.

4.5.4 A Dysfunctional Governance Apparatus

Since its cautious return to MTR landscape following the signing of the BTC Accord in 2003, the IFD has been largely functionally absent. Though the militancy associated with the Bodoland Movement has significantly ebbed since, the NDFB (Sangbijit faction) continues to be active to this day. Beset by significant paucities in manpower, transport equipment, and effective firepower, coupled with meager salaries, extremely limited career advancement possibilities, IFD field staff are reluctant to carry out their duties. During a conversation with personnel at a Forest Range Office, I was told that they have rifles "from the from the WWII era, that are sub-standard and frequently jam." As a Forest Guard put it, "The militants in the forest have AK-47s. If we have an encounter with them while on duty in the forest, by the time we load a single bullet into our guns, they would have emptied an entire magazine into us!" The Range Office had a single vehicle for patrol duties that was more often at the garage for repairs than in the field. Since the field staff were required to go on forest patrols twice a week, they would often do on bicycles.

Since the passage of the landmark 'Godavarman' decision by the Indian Supreme Court (1996), mandating that the conduct of all forestry operations be subject to and in accordance with approved forest "working plans" (Rosencranz and Lele 2008), the IFD has not been discharging a key part of its mandated duties in the RFs of the MTR. Legal timber extraction has ground to a virtual halt since not a single Forest Division has had an approved working plan since the 1990s. An IFD officer summed it up thus:

"We don't have any working plans, so if we don't have working plans, we are not legally bound to fell any trees. So, if you are not legally bound to fell trees, you are not providing anything to the public. The problem is that we are not matching timber demands and supply, and for supply we have to have a working plan ready. For the last thirty years, we don't have any working plan in the BTAD…not only the BTAD but in the entire state of Assam."

Continuing and increasing demand for timber has fueled an extensive illicit economy within the MTR RFs. Illegal timber extraction is driven by land occupation and associated tree-felling, as well as selective extraction of timber species. Beneficiaries include government personnel, political elite, timber merchants and contractors, and local people.

FD respondent #4: *"So when I say that there are local villagers or militants involved in the trade, it is wrong. Almost all persons with uniform, without uniform, civilians, political organizations, everybody is involved…the very simple thing is that timber is being taken out of the forest, everybody is party to that, and the money is being used to purchase arms and ammunition and to kill with"*

ABSU respondent #2: *"Somehow or the other they (militants) are indulging in kidnapping and extortion but the easiest way for them to earn money is through*

the sale of timber. There is no other way for them. Another problem is that how long can they stay in the forest? They have to live among the public living adjacent to forest areas. By allowing those people to cut trees, they will get shelter from them in exchange"

In a rural landscape where agricultural production is the only viable means of livelihood, illegal timber extraction provides a lucrative source of liquidity, a practicable option for households with limited land-holding, and a critical tool for risk management in a capricious landscape. For the Bodo political elite, it fills both personal and political coffers through a stream of unaccounted-for funds.

4.6 DISCUSSION AND CONCLUSION

What characterizes the gap between environmental legislation and its implementation? In an ultimate sense, the tribal slot as a category backed by colonial ideology, promoted by colonial discourse, promulgated through colonial policy, and enshrined in colonial era legislation sits at the heart of this gap, in and around Manas. That it was subsequently crystallized by the postcolonial government through Article 342 of the Indian Constitution has given it staying power. By legislatively fixing the Bodos (and other tribal groups) in geographic space through the designation of land as tribal belts or blocks, it enabled the notion of a 'Bodo homeland' and conversely set the stage for non-Bodos to be viewed as the 'Other' or the 'interloper'. At ground level, the widespread belief among the Bodos that their indigenous land has and is being usurped

by illegal foreigners (esp. the Bangladeshi), provides justification for the occupation of RF land. However, Bodos have opposed attempts by both the Koch Rajbangshi and Adivasi ethnic groups to acquire tribal status. Adivasis are considered tribal in their areas of origin (Misra 2007b), whereas the Koch Rajbangshis are viewed as being part of the Bodo/Kachari ethnic family (Gait 1906; Karlsson 2000).

Such shifting deployment of the tribal institution by the Bodos is particularly apparent in the way that it is expanded or constricted to achieve different aspects of a diverse political agenda. A struggle by Bodos residing in the Karbi Anglong district of Assam resulted in a recent decision by the GOI to accord ST status to them within that district. Since the *hills tribe* designation applies to Karbi Anglong, and Bodos are classified as a *plains tribe*, the decision is being strongly protested by the demographically dominant Karbi tribal community (Sarma 2016). However, a recent campaign by Naba Kumar Sarania, a member of the 'Sarania Kachari' community, for the Kokrajhar constituency seat in the all-powerful Lok Sabha (lower house of the Indian parliament) was strongly opposed by many Bodos on grounds that the Sarania Kachari community "was not notified as ST under Article 342(1)(2) of the Constitution or enlisted in the state ST list" (Choudhury 2014a). A Bodo had held the seat since its formal inception in 1957, and Sarania won the election by garnering significant support from non-Bodo communities within the BTAD. The Sarania Kacharis are widely recognized as being Hinduized Bodos, though "mutually antagonistic contractions" of the 'bonafide tribal' slot have kept them from securing the ST designation (Ahmed 2014, 361).

Secondly, how is this gap enacted, and what networks /structures of power widen or maintain this gap? In a proximate sense, the rise of the Bodoland Movement and with it, the simultaneous rise of an ostensibly peaceful political institution, the ABSU, as well as the violent institution of militancy has given the Bodos considerable political power. This heightened power has enabled their access to both land within the RFs of Manas, as well as to the key resource of timber. The involvement and the active support of militant groups in illicit logging within the Reserve, widely documented during the course of this research, embolden timber extractors. At a broader level, the fact that one of the two major Bodo militant groups, the BLTF subsequently morphed into a legitimate political party, the BPF has given the Bodos a sense of communal strength and instilled a sense of fear and unease amongst other ethnic groups, especially non-tribal ones who the Bodos have a history of conflict with. The current political apparatus is virtually controlled by the Bodos, a reality that engenders widespread resentment amongst the non-tribal populace of the BTAD. However, the alleged covert role of the GOI in the rise of the BLTF indicates the interactive role of the State in the Bodoland Movement. It is noteworthy that the supposed logic behind the State's support of the BLTF was to limit the power of another political group that had risen to power through a political and militant movement – the Asom Gana Parishad. Furthermore, the ascendancy of the BPF has politically sidelined the NDFB which had always demanded a sovereign Bodo nation.

Finally, who benefits from such a gap and who loses? The Bodos are the clear beneficiaries in terms of political power, socio-cultural status, and the inflow of State

funds earmarked for the BTAD. Thirty of the forty seats on the BTC are reserved for tribals thus virtually guaranteeing a Bodo political majority. There is an overall belief among non-Bodo groups within the BTAD that they are being politically and economically sidelined and that the Bodos are reaping a majority of the benefits that come with having a quasi-governmental apparatus like the BTC. The ethnic group that has tangibly lost the most is the Bengali Muslims. Apart from the Adivasis, they have been the most frequently targeted group in ethnic conflict situations. They have lost occupancy of considerable portions of erstwhile land, are politically marginalized within the BTAD, and according to at least one recent analysis, are "the poorest community" within Bodoland (Motiram and Sarma 2014, 49). Based on my interviews and one-on-one interactions, they seemed enveloped in an overall sense of unease and uncertainty about their future in the BTAD.

With its focus on the aesthetic and scientific aspects of the habitat of threatened species of animals and plants of global concern, the WHS system essentially aligns with the *fortress conservation* logic of the PA model followed by Indian national parks and wildlife sanctuaries. The inordinate articulation of Manas' governance apparatus with this model, and its simultaneous sidelining of a system (biosphere reserves) that is more aligned with viewing biodiversity conservation landscapes as simultaneously ecological and social systems, has important outcomes. Primarily, it serves to focus attention on a very limited portion (approx. 14%) of the entire Manas landscape while marginalizing the rest. This attention takes symbolic, material, and political forms. A clear majority of positive media reporting is confined to the MNP, and is replete with evocative

descriptions such as its ‘resilience’ that enabled its return from ‘the brink’, its ‘booming’ tiger population, and the conservation ‘warriors’ that are making it all possible. The IFD, the BTC, and a handful of influential environmental NGOs are the beneficiaries through both national and international funds, as well as through a diversity of direct and indirect career-related benefits including extensive media coverage, research grants, and publications, through association with an area of immense conservation value.

Furthermore, the FPGs have become a way of outsourcing the role and duties of the IFD for a relative pittance. At the time this research was conducted, the per-member remuneration for FPGs was INR 4000, of which INR 2500 served as a stipend, while INR 1500 was the monthly location for rations. According to an informant, a proposal has been sent to the Indian national government “to at least provide funding for 1000 volunteer force” and to “pay them INR 10,000 per month.” If this proposal is approved, then the stipend amount will increase to a little over INR 6000. While salaries for forest guards tend to vary across states in India, Assam is currently advertising a pay scale of INR 5,200 – 20,200 per month, which puts the proposed FPG stipend at the low end of the scale. Furthermore, forest guards, like other Indian government personnel, receive an array of benefits (e.g. pension) not available to FPG personnel (Financial Express Online 2017).

The FPGs of Manas have been characterized as an example of community-based conservation (Horwich and Lyon 2007) and positioned as an antidote to the limitations of “large budget, top-down Integrated Conservation and Development Projects, focusing at large scales” (Horwich et al. 2010, 258). In a study on the “motivations” of volunteers,

Allendorf et al. (2013) report that most of them "came from farming backgrounds" and their most frequently cited reason for being in the FPGs was "for conservation of the forest and wildlife" (428). Over hundreds of conversations with local farmers during my research in the Manas landscape, 'conservation' was rarely mentioned as an issue of importance, and if 'wildlife' was mentioned, it was most frequently invoked in context of problems that they faced from various wildlife species. Despite documenting that volunteers receive a fraction of the salary of comparable staff within the IFD, and none of the "housing and medical benefits" afforded to the latter, the study states that "salary was not mentioned as a problem" (ibid., 431). My interviews with informants with deep, extensive knowledge of FPGs revealed volunteer dissatisfaction with unreliable, meager stipends, particularly considering a belief that they took on a lion's share of the patrolling duties.

While portraying the workings of the FPGs as community "co-management", and decrying "topdown" approaches that are widespread within the field of environmental conservation, Horwich et al. (2010) fail to highlight the essentially hierarchical nature of "regional awareness campaigns" conducted by the authors where they "spoke of the importance of the forests and wildlife to local people" and distributed "posters, brochures, booklets and a book on the primates of north-eastern India" (255). Allendorf et al. (2013) describe the "more educated or motivated community members" taking on the role of "conservation leaders, passing along the message to others in their communities" (431). One of the founding forces behind FPGs is the powerful Deputy Chief of the BTC, Kampa Borgoyari, who also holds the portfolio of Forest Minister.

Borgoyari co-owns a high-end, luxury lodge located on the outskirts of the Manas NP and is therefore one of the most significant beneficiaries of tourism to the tiger reserve. The disproportionate influence and control over the system of FPGs by a select group of politically powerful, educated individuals is scarcely explored.

The punitive nature of such official policy makes no attempt to identify, or address the critical drivers of land occupation within the core area, much less the area most recently added to the National Park in August 2016 – Manas RF (located in the Chirang district). A recent study of fuelwood collection by residents of 142 villages located along the fringes of Manas demonstrated a high dependence on fuelwood both domestically and commercially. The annual domestic consumption for the study population was estimated at 62,000 tons of fuelwood, approximately 33% of the population was involved in fuelwood collection, and "more than 50%" of the collected fuelwood came from "forests" (Deka, Choudhury, and Kumari 2016). For example, in rural Chirang district, 63% of the working population is involved with agriculture as a primary or supplemental source of livelihood generation (Government of India 2017a). A dysfunctional government system originally designed to buffer farmers from crop price fluctuations, insufficient irrigation facilities, lack of "revenue settlement", and a virtual absence of robust credit and loan systems result in predominance of subsistence production and an abiding dependence on forest landscapes, within and on the fringes of Manas (Saikia 2017).

In conclusion, the continuance and further crystallization by the post-independence Indian State of colonial era policy and legislation that culturally and

geospatially fixed tribal identity has provided the framework for the gap between environmental legislation and its implementation. A perceived *illegal* occupation by perceived *foreigners* set the stage for Bodo incursion into RF land within Manas. A constellation of institutions, both formal (e.g. the BPF) and informal (e.g. the NDFB), enacted this gap through politically legitimate (legal political action) and illegitimate (violent conflict) practices that have been fueled by networks of political power at the national level (e.g. the Indian government's support of the BLTF), and at the local (e.g. the Bodoland Movement). The clear beneficiaries of this gap and its maintenance have been the Bodos, who have stood to gain politically, economically, and socio-culturally. They have effectively positioned themselves as the primary environmental caretakers of the Manas landscape, have benefited both politically and economically from this positioning, while making inroads into the RFs of Manas to illicitly occupy land, as well as benefiting monetarily from the extraction of key, commercially valuable forest resources.

CHAPTER V

CONCLUSION

In this Chapter, I present a synopsis of each chapter's findings, arguments and conclusions. I highlight the theoretical contributions of this dissertation and conclude with recommendations for future research.

5.1 SUMMARY OF THE DISSERTATION

The establishment of protected areas for the explicit purpose of biodiversity conservation has been frequently accompanied by the separation of people from their physical environment. This separation has resulted in outlawing or curtailment of long-standing modes of accessing environmental resources, and a tendency for erasing or obscuring local histories and ecologies of habitation (West, Igoe, and Brockington 2006). *Indigenous* or *tribal* people are regularly viewed as *people of the forest*, bequeathed with specialized knowledge of such ecosystems, characterized as forest stewards, and are often seen as victims of conservation enclosures (Dove 2006). Such characterizations tend to fix the territoriality, ecological practices, and socio-cultural norms that tribal people use to mediate their interactions with their environment, thus obscuring the agency of such groups (Li 2000). By extension, not all tribal groups are alike socially, politically, and economically, and even very similar groups could face radically different environmental outcomes depending on their specific social, political, and economic contexts.

This research responded to the scholarship on the social outcomes of PAs for forest dwelling communities through a case-study on the Bodo tribal community within the landscape of the MTR. It charted the history of the founding of this PA, the contemporary history of the Bodos, the process of environmental governance, and the implications of its establishment for the livelihoods of local residents. I used a political ecology framework to study the agents/actors as well as the processes that shaped land use, institutions, and ultimately environmental governance in Manas by utilizing an "assemblage" approach (Li 2007). Such an analysis of environmental governance necessitated attention to an array of "practices" that privilege particular meanings, create specific discourses, give rise to institutions, which in turn promulgate norms, policies, and legislation that mediate "materiality of ideology and power" (Ekers and Loftus 2008, 699). In doing so, I viewed PAs as explicitly social-ecological systems whose understanding necessitates a link between the material and the textual (Bakker and Bridge 2006) with regard to struggles to affect control over, access to, and use of natural resources. This study adapted the assemblage approach to foreground key "elements": *things* (forest resources, agricultural land, documents, technologies), *socially situated subjects* (forest dwellers, encroachers, forest department officials, NGO staff, environmental activists, private actors), and *objectives* (livelihoods, forest management, biodiversity conservation).

In Chapter II, I drew from Li's (2000) proposition that the development of a self-realized *tribal* identity is neither "natural" nor "simply invented" but rather is a "contingent" outcome of the entanglement of cultural meanings, ecological practices, as

well as the conceptualizations of the State. I demonstrated that the Bodos developed a self-realized understanding of themselves as *tribal* people through a long, multifaceted history of engagement with colonial and postcolonial administrations that sought to transform "old forms of life by systematically breaking down their conditions, and with constructing in their place new conditions so as to enable—indeed, so as to oblige – new forms of life to come into being" (Scott 1995, 193). However, the development of a Bodo self-realized ethno-regional identity was not a linear process but a dynamic, ongoing dialectic to shifting landscapes of policy, politics, demography, and land control. In doing so, the Bodos did not conform to James Scott's (2009) thesis of state evasion, instead both adopting and rejecting tropes of external classification to further their own socio-cultural, economic, and political imperatives. Instead, the goal of the Bodoland Movement was to carve out a separate state within the framework of the Indian Constitution, and push for further integration into the economic mainstream by demanding overall development. In this manner, the Bodos have adopted a cultural subjectivity which is itself an "artifact of hegemonic systems of knowledge" promulgated by a colonial State and extended, largely unchanged, by a postcolonial one (Robbins 2012, 222).

In Chapter III, I aimed to examine the livelihood strategies of resource users both within and on the fringes of Manas. I focused on the socio-cultural, economic and political underpinnings of observed patterns of land use. In a landscape with agriculture as the primary means of livelihood production, and with very limited options in other economic sectors (e.g. industry, technology), forest land and its associated resources was

a major source of both subsistence (food crops) as well as disposable income (cash crops, fuelwood, timber). In a landscape replete with risk from flood-related damage, lack of formal credit systems, informal taxes levied by militant groups, and limits to the availability of arable land exacerbated by land enclosure by the State, livelihood risk was mitigated by illicit means of production through occupation of RF land, and through forest resource extraction (McSweeney 2004). Furthermore, the Bodos aligned with a recent legislation with the potential to formalize *encroached* RF land, while opposing the attempts of other groups (e.g. Adivasis) from benefitting from it, as well as actively and aggressively expelling them from their illegally occupied land. In doing so, the Bodos developed a livelihood identity that attempted to "exercise control over their conditions of existence" (Bebbington 2000, 513) through contradictory strategies enabling them to make a living on their own terms.

Chapter IV explores the structure of governance of the Manas landscape that goes beyond "simply government, but more precisely refers to the process of social and economic coordination, management and 'steering'" (Gregory et al. 2009, 312). In it, I detail how the category of being *tribal* mediates the gap between environmental legislation and its implementation through a socio-cultural and political process that justifies illegal occupation of RF land because non-RF land designated exclusively for tribal communities had been encroached upon by the illicit *other* (e.g. Muslims). I also demonstrated how the *gap* was enacted and maintained by both tribal and State institutions through an interactive process that enabled the creation of a specific *environmental subjectivity* for the Bodos (Agrawal 2005; Robbins 2012). This

subjectivity primarily benefitted the Bodo community through the alignment with a system that privileged conservation enclosures (Manas as a WHS) over one that favors a social-ecological system (biosphere reserves) approach. The WHS system facilitated the Bodos in positioning themselves as *protectors* of the Manas landscape, enabled an array of benefits for a minority of elite interests (political, governmental, and NGO), and focused managerial efforts to a relatively small section of the Manas landscape (the Manas NP) at the expense of a clear majority of the area (the RFs). The Bodos thus stood to gain from the governance system while actively occupying RF land, being the prime movers of an illicit timber economy, and displacing other communities from such land parcels both within and on the fringes of Manas.

5.2 THEORETICAL CONTRIBUTIONS

My research contributes to intersecting bodies of knowledge relevant to the development of environmental subjectivities, livelihood production in landscapes of biodiversity conservation, and their role in mediating environmental governance. In Chapter II of this dissertation I support the proposition of anthropologist Tania Li (2000, 2002) that the slot of *indigeneity/tribalness* is a "positioning" that is contingent upon both external and internal notions of what it means to be indigenous/tribal. I charted the history of the crystallization of a self-realized, ethno-regional *tribal* identity by the Bodo community within the Indian state of Assam through interactions with colonial as well as postcolonial States. I demonstrated the ever-changing way in which the Bodos aligned with "the nation, the government, and their own, unique tribal place" through the

enactment of cultural and political agency (Li 2000, 151). In doing so, I also highlighted the "dark side" of the Bodo tribal slot through its essentialism-driven oppression of non-tribal groups as well as the capture of resources and institutions by Bodo elite through appropriation of global discourses pertaining to *tribalness* (Li 2002; Shah 2007a).

In Chapter III, I build on Paul Robbins' thesis of the generation of a "livelihood identity" through "making a living" (2012, 224). In a landscape with scant modes for livelihood generation apart from agriculture, limited means for generating disposable income, and a diversity of risks to a system of predominantly rain-fed cultivation, the Bodos relied on the Manas landscape to ameliorate risk to both crop production and household revenue. They illegally occupied forest land within Manas, illicitly extracted commercially valuable forest resources (timber, fuelwood), while self-identifying as forest-dwelling protectors of the forest. In doing so, they expressed a sense of land-alienation resulting from the practices of non-*tribal* residents who they portray as having encroached on *tribal* land. The Bodos concomitantly aligned with legislation (the FRA) that can potentially legalize their encroachments within Manas. Thus demonstrating that issues pertaining to biodiversity conservation and ecological sustainability are distant concerns for "the masses of the rural poor who are struggling to make ends meet by tilling their fields and through migrating in search of wage labour" (Shah 2007a, 1824).

Chapter IV extends Arun Agrawal's notion of "environmentality" and the creation of "environmental subjects", through the use of the Manas landscape by the Bodos as a "domain" for the organization of both thought and action. Bodos claimed Manas as part of their natural heritage which they positioned themselves as protecting

both through discourse and practice (FPGs), while simultaneously clearing land within its RFs, contributing to deforestation through tree-felling to produce timber and fuelwood, and, ironically, ascribing such practices to other groups (e.g. the Adivasis). The result was a contradictory domain that produced inconsistent environmental subjects who both participated in and rejected the technologies of the State, thus straddling the gap between environmental legislation and its implementation in the MTR.

The three core chapters of this dissertation contribute to Robbins' "environmental subjects and identities" thesis (Robbins 2012, 215). The "technologies of power that form subjects and encourage them to define themselves in particular ways" included formal classification of the Bodos as tribal (e.g the Scheduled Castes and Scheduled Tribes Lists (Modification) Order, 1956), their official categorization as forest dwelling Scheduled Tribes (in the FRA), which in turn led to "technologies of the self that individuals apply to themselves to transform their own conditions" (Agrawal 2005, 180). As a result, Bodos came to view themselves as socio-culturally distinct from other communities within Assam, which in turn provided the impetus to carve a space of autonomy and self-determination for themselves (the BTAD), while yet articulating with hegemonic ways of knowing (being *tribal*). In doing so, they demonstrated their *tribal* knowledge as "dynamic, formed and reformed in dialogue with various groups, agendas, and processes" (Li 2002, 369). As Paul Robbins puts it, "both consent in, and dissent from, environmental regimes are not a mere matter of choice, or even political action, but are entangled with how people come to think of themselves" (2012, 226).

5.3 RECOMMENDATIONS FOR FUTURE RESEARCH

As I discussed at multiple points in this dissertation, the feeling of land alienation among the Bodos stemmed from the perception that land legally reserved exclusively for tribal groups had progressively been occupied by non-tribal groups. Bodo respondents frequently cited a legislation [Assam Land and Revenue Regulation (Amendment) Act, 1947] that demarcated BoBs whose occupation was limited to *tribal* people, and expressed frustration that such land areas had been progressively settled by non-*tribals*. I explored the often-contradictory processes through which this had happened, for example, Muslim respondents describing how they had purchased land through informal cash transactions from Bodo landowners only to vacate it later under duress during ethnic conflict. However, I was informed during this research of legal mechanisms through which BoBs land could be formally transferred to non-tribals. For instance, a key informant apprised me of a tendency for Bodo landholders to have significant land tax arrears which results in the possibility of land shifting to State control in the event of the landowner's ability to pay the outstanding amount, and its subsequent sale to a non-tribal individual. Hence, it would be interesting to get access to land records and additional documents pertaining to land transfers to assess processes through which non-tribals are able to obtain land within BoBs. This in turn would inform a key dynamic through which the Bodos deploy a *tribal* identity – control over land they deem to be part of their ancestral domain.

The extraction of timber from the RFs of Manas was a frequently observed and oft discussed means of livelihood generation by residents. As discussed in Chapter III,

this enterprise generated more revenue than any other form of land use within the study area. As noted earlier, while the illicit nature of this form of natural resource extraction limited data collection pertaining to its extraction, a potentially more fruitful avenue for future research might be to focus on more distant nodes of the commodity chain, such as middlemen, and wholesalers in urban centers. Such research could illuminate the remote drivers of this trade. Furthermore, the cessation of legal timber production by the IFD was ascribed by respondents to the militant period of the Bodoland movement and the resulting drawback of the State. The concomitant absence of a formal forest *working plan* legally prevented IFD-led timber generation during this research. Future research might benefit from the focus on the development of these documents as well as the political, economic, and policy factors that influence their creation.

Due to logistical limitations, this research was not able to adequately explore the engagement of the governance apparatus of Manas with the *biosphere* model of natural resource management. Effective governance of a significant section of the entire land area of Manas is possibly more amenable to the improvement of livelihoods and the equitable sharing of benefits arising from this ecosystem. Future research would do well to focus on institutional drivers mediating the relative lack of attention to the biosphere system of environmental management.

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APPENDIX A

FIXED SURVEY INSTRUMENT

	Response
1) Years resident in village, or since household formation (a) ***<u>Where</u>*** *did you live before?* (b) ***<u>Why</u>*** *did you move here?* (c) *How much land did you own before coming here?*) [Get a sense of ***<u>history</u>***]	a) b) c)
2) Age of household head *(male or female)*	
3) Number of male workers *(15–65 years)*	
4) Number of female workers *(15–65 years)*	

5) Number of dependents *(0–14 years and ≥ 66 years)*	0 – 14: 66 + :
6) Headed by single woman	no / yes
7) Number of adult brothers of male/female head in village	
8) Number of years formal education of male/female head	
9) Male/female head's fluency in Hindi	0 / 1 / 2 / 3
10) Male/female head's fluency in English	0 / 1 / 2 / 3
11) Male/female head's fluency in Assamese	0 / 1 / 2 / 3
12) Number of members studying away during study *(excluding heads)*	

13) Number of members working away from home during study *(excluding head)* *(Any remittance? How much?)*	Remittance: no / yes
14) Business experience through store / shop ownership (*Average daily/monthly earning?*)	no / yes Type: Earning:
15) Number of work-days on *job-card* (NREGA) (*Average daily earning?*)	no / yes No. of days: Daily Earning:
16) Number of work-days in *Hajira* (or other labour) (*Average daily earning?*)	no / yes No. of days: Daily Earning:
17) How many vehicles do you own?	Bicycle: Motorcycle / Scooter: Tractor / Power Tiller: Car / Jeep:

18) Electronic equipment	TV: Computer: Mobile Phone: Solar Panel:
19) Are you involved in Adi? (On your land? On someone else's land?) (*Area; Crop; Quantity; Sale*)	no / yes Own / Other Area: Crop: Quantity: Sale:
20) Total landholdings in floodplain / wetland (DA MATI) and/or high land (OKHA MATI)	
21) Total landholdings in newly acquired land (NOTUN MATI)	no / yes

[*within MTR boundary or not*]	Forest Land: no / yes
22) Total *area* planted in *Rice* How many *varieties* of rice? How many crops (in past year)? Quantity (Maunds) / Bigha Home Consumption vs. Sale	Area: Varieties: No. of crops: Quantity / Bigha: Sale: no / yes
23) Total *area* planted in *Jute* Quantity (Maunds) / Bigha; Home Consumption vs. Sale	no / yes Area: Quantity / Bigha: Sale: no / yes
24) Total *area* planted in *Mustard* Seed Quantity (Maunds) / Bigha; Home Consumption vs. Sale	no / yes Area: Quantity / Bigha:

	Sale: no / yes
25) Total *area* planted in *other crops* Quantity (Maunds) / Bigha Home Consumption vs. Sale	Area: Quantity / Bigha: Sale: no / yes
26) Have home garden [Area; Crops planted] (*Income from sale?*)	no / yes Area: Quantity / Bigha: Sale: no / yes
27) Use of agro-chemicals Types (fertilizer, herbicide, pesticide), quantity, frequency	no / yes **Fertilizer** Brand: Quantity: Frequency: **Herbicide**

	Brand: Quantity: Frequency: **<u>Pesticide</u>** Brand: Quantity: Frequency:
28) What problems do you face with regard to agriculture?	
29) Number of head of **livestock** owned *(during study)* [*COW; GOAT; CHICKEN; PIG; DUCK*]	Cows: Goats: Chicken: Pigs: Ducks:

	Others:
30) Livestock lost to wildlife [*Type, frequency, identity of predator*]	no / yes Type: Frequency: ID:
31) Number of *bullock carts*	
32) Number of *hand-drawn carts*	
33) Forest visits [*Frequency*]	
34) Collected *firewood* [*Frequency; Quantity; Profit*] Follow up: a) Do you only collect fallen, dead firewood?	no / yes Dead & Fallen / Live Type: Frequency:

b) Do you cut live trees? c) Have you observed others cutting live trees?	Quantity: Mode of Transport: *Manual / Bicycle / Handcart / Bullockcart* Income: Payment: Observed others: no / yes
35) Collected <u>*Timber*</u> [*Frequency; Quantity; Income*] Follow up:	no / yes Type: Frequency: Quantity (in KB): Income: Payment: Observed others: no / yes

36) Collected *NTFPs (Non-timber forest product)* [*Frequency; Quantity; Income*]	no / yes Type: Frequency: Quantity: Income: Payment (e.g. for permit):
37) *Fishing* [*Location; Frequency; Quantity; Income*]	no / yes Type: Frequency: Quantity (in KB): Income: Payment:
38) Hunted *bush meat* [cultural; frequency; species; profit; consumers]	no / yes Cultural / Sale Type:

	Frequency: Quantity: Income: Payment:
39) No. of sectors in which income earned *(during study)* [*Agro; Job; Store; Timber; Firewood; Bushmeat; Fish; NTFP*]	
40) Number of days head lost to own or other's illness (only 15-65 yrs)	
41) Number of deaths *(during course of study)*	