Politics of Conservation

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Abbreviations

AFPF	Assam Forest Protection Force
ADC	Autonomous District Councils
AFR	Assam Forest Regulation Act, 1891
CCF	Chief Conservator of forest
CEO	Chief Executive Officer
CFM	Community Forest Management
Cr. P.C	Criminal Procedure Code
DCFA	District Council Forest Act
DFO	District Forest Officer
ICAR	Indian Council for Agriculture and Research
MoEF	Ministry of Environment and Forest
NER	North-East Region
NEFA	North Eastern Frontier Agency
PIL	Public Interest Litigation
NFC	National Forest Commission
UNDP	United Nation Development Poject
USAID	United States Agency for International Development
WB	World Bank
WWF	World Wide Fund for Nature

Introduction

Officially, 23 percent of India's territory is 'recorded' as forest and the Indian forest policy aims to raise the forest cover to 33 percent. Concerned at the rapid loss of forests for other land uses, the Government of India enacted a series of forest legislation[1]. The Forest Conservation Act, 1980, for example made it mandatory for state governments to seek central permission before diverting any forest land to other uses. According to Sarin, even the legal status of many forest lands are open to challenge and these lands are yet to be clearly demarcated. The world-wide prominence of biodiversity conservation in recent decades has made the Indian judiciary intervene actively to protect the environment, which as a result, has created new distortions and conflicts instead of promoting forest conservation (Sarin, 2005:04).

Forest policies and legislations in India can be traced back to colonial expansion and to what Vandergeest & Peluso call process of 'terriotrialization' to control people and their actions by demarcating boundaries and prescribing specific activities within these boundaries, facilitating the control of natural resources by the state (cited in McCarthy, 2005: 77). Historically, the Forest Department in India has served as a silvicultural and law-enforcing body charged with maximising revenue by extracting timber. Since colonial times, the dominance of scientific conservation as an overriding objective for maintaining forests and the policing approach of the Forest Department became important means for the preservation and conservation of forest resources. It is this preservationist thrust which form and influence India's conservation laws and policies even today.

In this dissertation, I examine forest policies in India in general and take three states—Assam, Arunachal Pradesh and Meghalaya—situated in North-Eastern part of India as a reference points to illustrate how forest laws are linked to the politics of the region. The implication of this dissertation is not to suggest that forestry problems do not exist or that forest policies and laws are unnecessary in North-East India. Instead, I explore the deeper politics of how and why—and with whose influence—forestry and environmental problems are defined the way they are, and to understand the political constructions of forest problems and policies, and how these restrict the livelihoods of forest dwelling communities.

[1] For more details see Report of the National Forest Commission, 2006

North-East India inspires images of insurgency problems, dense forests, wild animals, and remote hillside villages inhabited by different hill tribes. Yet the region is marked by an enormous amount of development aid and infrastructure investment by Central Government and global donor agencies showing the increasing political importance of the region in recent decades, especially in Arunachal Pradesh. In this dissertation the term North-East has been used to denote the three states of Assam, Arunachal Pradesh, and Meghalaya and the use of the term 'North-East' in this paper does not in any way replicate the homogenisation of the region; rather, it is used only to understand the political classification of the region.

It is difficult to discuss knowledge about forestry problems in the North-East without referring to the region's complex political pasts. Current debates about environmental problems in the region are still influenced by knowledge produced during colonial times and thus the conservation of forest resources has come to be seen as a prime strategy for preserving the biodiversity of North-East. The production of environmental knowledge and the politics of state-making need to be considered together, because the politics of state-making has inherently created visions of environmental crisis and associated classifications of social groups in the region.

The dissertation is an effort at further exploring the relationship between government and subjectivity and shows how regulatory strategies—especially laws, narratives and community decision making—help transform those who participate in government and how the objectification of nature is closely linked with the subjectification of environmental actors. I look at the interplay of forest laws, local practices, environmental narratives, and institutions of justice, conceptualising the relationship between state and non-state legalities through the increasingly sophisticated manner in which they intermingle and in which the state ultimately prevails.

The Structure of the Dissertation

Chapter 1- **'Scientific Forestry and the Conservation of Forests'** deals with the meaning and the idea of conservation, tracking how certain objects become conservation objects and how the idea of conservation is legitimised in the eye of the general public. It explores the origin of scientific forestry and its introduction in India by the colonial government, which in turn legitimises the regulatory and normalising practices of the colonial state. Chapter 2 **'Making of**

Forest Policies and Legislation in India' vividly describes the various policies and laws both in colonial and post-colonial India, and suggests that the present forest policies, with slight changes, are a continuation of colonial forest policies. Chapter 3 **'North-East India'** explores the socio-political-historical analysis of forest policies in the region, and argues that the politics of forest conservation in the region is closely linked to the politics of the region. The chapter also explores colonial and post-colonial strategies of legitimising control over population by producing institutions and discourses centered around forest resources. Chapter 4 **'Politics of Conservation'** looks at the strategies and tactics of government in the art of governance and how the forest laws, narratives of population pressure and environmental destruction were strategically applied by the state to achieve the desired results of governmentalization of forests and forest dependent populations.

In sum, my dissertation is an attempt to understand the problems of forestry and governmentalization in North-East Region through the mirrors of mainly colonial forest conservation policies, invoked through the problems of indigenous and scientific knowledge, environmental narratives, forest policies and laws, population explosion thesis, Autonomous Districts Councils (ADC), and community ownership and participation in forest management. It is equally emphasized that to understand the historical roots of state-making in the North-Eastern Region is to understand the nature of forest conservation. **.** The strategies of control at work at various levels—from Autonomous District Councils to Supreme Court's judgments—brought into play a wide range of ideas that assigned the state, both colonial and post-colonial, an assertive role in the management and control of forest resources. I have used Foucault's idea of governmentality to understand the regulatory practices of the state in the process of disciplining and controlling subjects in the process of state making. I have argued that forest policies and laws are central themes of governmentalisation which facilitated the state power to penetrate deeper into the once unexplored areas and produced environmental conscious subjects who became partners in their own governance.

CHAPTER ONE
Scientific Forestry and Forest Conservation in India

"Knowledge was what colonialism was all about".
Nicholas Dirks[2]

The term 'conservation' did not exist as we know it today as a particular activity, requiring special expertise and skills, but developed simultaneously, over the course of time, with interactions from various other socio-political institutions. The idea of 'conservation' has travelled from small-scale societies, who follow rudimentary and simple traditional ways to conserve their surrounding forests and natural resources to world class universities and research institutions where departments of Environment and Forestry have been established to train scientific conservationists and environmental experts who generally employ pure sciences and latest management techniques in their actions. Traditional and scientific conservation methods often come into conflict with each other, where both of them label the other as destructive and claim themselves to be the real conservators. The same is true for the communities[3] living in the most of the North-East Region of India, where tribal communities have traditionally managed and conserved forest resources, but with the coming of British in the region, the conflict started for the management and control of vast forest reserves. In post-independent India, the Indian government has carried forward the legacy of confusions and conflicts started during the colonial period which has further complicated the situation in the region.

[2] See 'Foreward' in Cohn, B (1997) Colonialism and its Forms of Knowledge: The British in India. Oxford University Press. New Delhi

[3] Community refers to a group of people who share a common identity, based on factors such as geographical location, class or ethnic background, or who share a special interest, such as a common concern about the destruction of rainforests. The assumption that a 'community is a homogenous group' is a general assumption and heterogeneity exists in communities and realities of social hierarchy, or social divisions determine equity and perceptions of fairness. Nor is it true that communities necessarily share common interests in resources Nongkynrih, AK (2002) *Who is in? Who is out? Equity and Customary Community Forest Management in Meghalaya,India*.www.recoftc.org

By community the paper mean forest communities and forest peoples who have social, cultural, and economic ties to nearby forests, recognizing that "community" is a debated concept that can be defined in multiple ways (Charnley, S & Poe, MR (2007) *Community Forestry in Theory and Practice: Where Are We Now?* Annual Review of Anthropology. 36: 301-336, pp 303). But unlike Charnley and Poe, who talks about de jure form of forest conservation, in this paper emphasis is laid on community forestry as a field based on traditional and customary forms of forest conservation practices and management by communities, rather than on government sanctioned de jure form of management. For more details on 'community' also see Sundar, N (2000) *Unpacking the 'Joint' in the Joint Forest Management*. Development and Change. Vol 31, pp 255-279.

Before going into the details, let us first look at the meaning of the term 'conservation' and its use in the modern lexicon. *The Webster English Dictionary* defines conservation as, "to keep from damage or loss and planned management in conserving". *The American Institute for Conservation* defines conservation as "the profession devoted to the preservation of cultural property for the future" and it generally refers maintenance of genetic, species, and ecosystem diversity (Vinas, 2005: 180). According to Smith & Wishnie, conservation refers to practices that are designed to prevent or mitigate biodiversity loss and are designed to do so. Conservation is a social process inextricably linked to social and political institutions influencing resource management and the main purpose of conservation is to maintain or reveal an object's true nature of integrity (Smith & Wishnie, 2000, Holt, 2005). For an action to qualify as conservation, it should be performed upon a certain kind of object which has symbolic nature and the symbols communicate something. Many objects have a symbolic meaning, but it must be noted that an object's ability to convey meanings is a requisite for it to be considered as a conservation object, and thus power plays an important role because among the many objects which have symbolic ability, the more powerful symbols are more likely to become a conservation object (Vinas, 2005: 145-147). The effect of power/knowledge can also be seen when some objects are selectively forgotten in comparison to objects selected for conservation.

Conservation practices have become a scientific zone, where scientific talk is isolated from the other social '*language games'* and only a group of experts know how to interpret the language of conservation objects. Language games make conservation an expert zone where 'scientific truth' is contended by scientists or experts who share this knowledge, with the public being considered as a mere audience with no special authority. According to Vinas, "The criticisms towards scientific conservation are not directed against the idea of science, but against the idea that science, and especially hard science, can be the guiding criterion behind conservation decisions at most levels" (Vinas, 2005:145-147).

The idea of 'rarity' (Sivaramakrishnan, 1999) and 'damage' are crucial notions in the conservation debate not only in the North-East India, but also in other parts of the world. In other words, it is a prerequisite for conservation to exist, and if no thread of potential or actual damage exists, no conservation act would ever be performed (Vinas, 2005:101). Thus, under the banner of 'rarity' of species and the 'threat' of the unusual, the need for conservation was pressed and

legitimised by conservationists backed by various colonial and post-colonial governments, scientific institutions and experts funded by national and global donor agencies.[4]

The notion of conservation along with the idea of 'rarity' and 'threat' also requires 'spatial' and 'geographical' location to practice the art of conservation. Assam, Arunachal Pradesh and Meghalaya in North-East India have been taken here as specific reference points. The present–day idea of the conservation of forestry dates back to nineteen century colonial debates on conservation of forest resources of the colonies to supply and sustain the increasing demand of colonial government for its expansion and wars with rival colonial powers. The British military surgeons and botanists championed the idea of the conservation of forest resources in South Asia, linking it with environmental degradation and desiccation (Grove, 1995). Backed by scientific experts, the colonial administration passed forest laws in India to protect valuable forest for the empire and thus, according to Agrawal, the West was able to colonise other regions because of its superior knowledge, which in turn allowed it to exercise greater power and the imperative of conservation is similarly an outcome of superior knowledge the West possesses (Agrawal, 1997).

Like development theorists, conservationist theorists argue that forest resources, considered the "patrimony of mankind" are mostly located in the tropical countries of the third world and can only be protected by the resources and expertise of developed countries, because tropical countries do not have enough resource and expertise to conserve the biodiversity[5] they control, given faulty policies and exploding populations (Agrawal, 1997). With funding and pressure

[4] Community forestry projects in North-East India are funded by Mac Arthur Foundation and USAID.

[5] The idea of biodiversity as a social construct and historical discourse is loaded with representations and invented traditions of cultural memory. The selective reconstruction and collective political consciousness have been the focal points of recent critical reflections increasingly addressed in international conservation discourse as well as in research by anthropologists and other social scientists on aspects of human engagement with biological resources. The term biodiversity is of recent coinage and first used in 1986 in the 'National Forum on Biodiversity' organised under the auspices of the National Academy of Sciences and the Smithsonian Institution in Washington, D.C. It captured the captured public imagination and became a rallying point at the Rio Earth Summit in 1992. Biodiversity is the variety of life forms, the ecological roles they perform, and the genetic diversity they contain and has a wide range of direct uses for food, medicine, ritual, construction, and commerce and performs critical environmental services such as maintenance of nutrient and hydrologic cycles, regulation of air quality and water purity, preservation of habitat, and reservoir of evolutionary change (Nazarea, 2006). Biodiversity has a variety of meanings in the conservation literature and most commonly, it refers to species richness in a given area. Biodiversity is the total variety of species in the earth (Mukherjee: 2004). According to Escobar, the idea of biodiversity is a 'historically produced discourse' and calls for its conservation are seen as the means to renegotiate the dominant discourse on nature and culture—that reinforces the interconnectivity between identity and ethnicity, territoriality, autonomy, and natural resource claims (Escobar & Paulson, 2005). India is a signatory of the Convention on Biological Diversity (CBD) and Indian government passed the Biodiversity Act in 2002, and the Biodiversity Rule in 2004 (Yumnam, 2008: 297). Also see Simberloff, 1999.

from developed countries, tropical countries opened their forest resources, which were managed by local communities in accordance with traditional practices to experts who employ modern scientific methods, and claim themselves to be the protectors of tropical forests. In the case of the North-East most forest resources were managed by tribal communities in accordance with local rules and customs (Xaxa, 1999, Karlsson, 2005) of particular tribes, but with the advent of colonial policies extending control over land and forest resources, in the North-East violent conflicts ensued with forest tribes, whose livelihoods mostly depended on forest resources. The conflict started during the British period and has continued, with more issues added, culminating in the demand for secession and independence, in post-independent India.

There are mainly two broad groups in the scholarship devoted to the study of conservation: one champions the role of indigenous communities in the conservation of forest and natural resources whereas the other propagates the gospel of scientific forestry, arguing that conservation by indigenous communities is a myth.

According to Smith & Wishnie, the debate on indigenous and scientific conservation has become politically charged and those working on behalf of the indigenous communities view critiques of indigenous practices of conservation as attacks on their efforts to defend local resource control by indigenous groups. In the last three decades, the idea that small scale societies and indigenous peoples are conservationist gained widespread popularity in academic circles which has often attributed to these groups a spiritual respect for, and a practical understanding of, the natural world. The evidence offered in support of indigenous conservationists includes culturally expressed conservation ethics, animistic religious beliefs, the high levels of biodiversity and the local environmental knowledge they possess. Anthropologists, researchers and non-governmental organisations (NGOs) have documented dozens of systems of communal ownership and management of forest resources, many of them quite long-lived and providing considerable evidence of explicit and effective conservation practices. Indigenous peoples and small-scale societies are often been portrayed as the ‘guardians of earth’ and ‘creators of biodiversity’ living in harmony with the natural environment (Smith & Wishnie, 2000). The Apatani in Arunachal Pradesh, the Khasi, Garo, and Jaintia in Meghalaya and the Naga tribes in Nagaland in the North-East are often cited as examples of community ownership and conservation of forest resources.

Whereas other group have argued that human populations have generally modified their environments, sometimes in ways that enhance short-term profit at the expense of long term stability and biodiversity conservation. According to Holt, "Resurgent protectionists advocate a return to strict nature protection characterized by excluding most people from ecologically fragile areas. Certain groups of indigenous residents, namely those with low population densities, simple technologies, and subsistence economies, are seen as conservation friendly, but groups who are experiencing demographic growth, using Western technologies, and producing for the market are perceived as incompatible with biodiversity conservation" (Holt, 2005).

The indigenous conservationists have often been labelled 'primitive polluters' and there is little evidence that indigenous societies have been conservationists. On the contrary, wherever people have had the opportunities to exploit forest resources, they have fully done so (Holt, 2005). The idea of deliberate conservation by native peoples was a myth and due to human activity thousands of forest species have been lost. Traditional environmental practices are inherently environmentally damaging and because of this parks and reserve forests were necessary to maintain biodiversity. According to Hardin, freedom in the commons brings ruin to all and thus 'enclosures' were necessary for long-run resource management (Hardin, 1968). According to Sinha, Meghalaya, despite the forest resources being under the management of local communities, has seen deforestation and loss of biodiversity (Sinha, 1993). In other words the community has failed to conserve forest resources under its management.

However, there are disagreements with Sinha's conclusions. Research from other regions of the world has provided examples of communal forest conservation that need not always have tragic results. Current theories on community forest management describe common property not as unrestrained group resource for use, but an institution of self-governance that evolves when community members agree to impose certain limits on their individual claims (Johnson & Nelson, 2004). Sinha's critical view of community forest management in Meghalaya needs to examined because he fails to take into account ground realities. Communities are not homogenous entities, but are fractured alone lines of caste, class, and ethnicity, and the actual control of forests lies in the hands of district councils and not communities, whose main source of income are timber revenue (Karlsson, 2005). According to Henley, traditional conservation practices in Indonesia worked partly because of inequalities within communities (Henley: 2008:

280). Thus it appears that the same inequalities within communities can work in different ways in different regions.

Idea of Scientific Forestry

Scientific forestry[6] was originally developed in Prussia and Saxony in the eighteenth century, and later on in Western Europe, particularly in Britain, France and Netherlands, which called for the selective harvesting and planting of trees to ensure future timber supplies (Bryant, 1996, Scott, 1998). As the British had no tradition of managing timbers forest, the Forest Department in India was started by German foresters, and with the appointment of Dietrich Brandies in 1856, as Superintendent of Forests in Pegu (now Myanmar), the era of scientific forestry in India was launched (Ribbentrop, 1989:09). The new discipline of scientific forestry, according to Scott (1998), was a sub-discipline of cameral science, which allowed for the systematic management of forest on scientific principles.

The idea of scientific forestry in India was borrowed from European countries, particularly Germany and France, where regular and systematic forest management has existed for several years with a positive result of well-stocked forests. Dietrich Brandies, German forester of British India, was of the view that although climate and species of trees are different in India, the principles upon which systematic forestry is based are the same in all countries and, and in the future it would be necessary to build the Indian forest system on the successful experiences of those European countries where scientific forestry is old and best understood (Brandies, 1994:40).

Most late eighteenth and nineteenth century environmental policies owed their foundations to philosophical and practical concepts that fully developed by the mid-eighteenth century. The idea of the Botanical Garden as a new symbolic location for the re-creation of paradise in earth

[6] Official forest management in colonial India followed certain systematic procedures like the development of 'working plans' (Brandies, 1994), and similarly in post-independent India, felling of forests was not permitted even to the State Forest Departments until and unless a 'working plan' approved by the Government of India is obtained. (Report of the National Forest Commission, 2006). Scientific knowledge is usually defined as a form of understanding that is based on a system of rules and practices that make it more legitimate and trustworthy than other forms of knowledge. According to Frosyth & Walker (2007), this approach is called a "positivist" approach to science, and the rules are often called the scientific method. Its aims to seek generalisable cause-effect statements based on established methods, where ongoing scientific studies are supposed to challenge and reform current beliefs. However, science is not merely a matter of systematic procedures. It is a system of continual open scrutiny of the procedures being employed towards any given set of objectives, such as the estimation of stocks and yields of certain species that can be sustained, and of the level of reliability of the results these procedures produce (Gadgil, 2007). Also see Sivaramakrishnan, 1999, Agrawal, 1995.

became central to the changing vision of nature, and together with it, the symbolic idea of the fragility and ‘rarity’ of the unusual, i.e. something which is rare and thus need to be conserved, became major motivating force in the botanical exploration of the eighteenth century and classification in which ‘rarity’ could be measured (Grove, 1995).

With an aim to control tropical diseases and understand the flora and fauna of the orient, the East India Company became more conscious of the value of botanical science and began to accord a new status to botanist. The new Botanical Gardens in Europe became experimental laboratories, where plant species were brought from distant places and taxonomically classified. In the course of time, these Botanical Gardens themselves acquired a meaning as symbols of an economic power capable of reaching and affecting the whole biological world. According to Grove, as landscape ‘texts’, the Botanical Gardens signified a particular type of ecological control that had not previously been available. The commercial development and demand for timber facilitated the assembling and sampling of plant species from all quarters of the world, and the early scientific societies, especially in Britain and France, sought increasingly to systematise the collection of botanical and other knowledges (Grove, 1995: 336).

The complex scientific and symbolic image of the botanical garden as an institution, which in India had peculiar Mughal connections, provided the practical base for the new-found appreciating of the ‘vulnerability of the environment’ to human action, which was guided by a strong medical preoccupation with the workings and interdependence of environmental factors and human health, underpinned by a growing awareness of the pharmacological significance of tropical plant species (Grove, 1995: 409). Imperial science in British India suggested a colonised world as a kind of laboratory in which the natural world was not only catalogued, studied, and observed, but also technologically manipulated in the name of commercial transformations on a great scale. The advance of science and the advance of colonial rule went hand in hand, where science helped and rationalised colonial rule to justify European domination over other peoples, and to transform production for an expanding world economy. The imperative of imperial science and the worldwide application of science to the productive control of nature were closely associated with the expansion of colonialism and the commercialisation of natural resources in India. According to Gilmartin (1994), the discourse of scientific empire was in some ways not separate from that of imperial science, with its emphasis on the classification and transformation of the natural world.

The climate and deforestation theories—championed by imperial botanists, surgeons and scientists, that forest could be directly linked to atmospheric moisture and the theories further proposed that human might control the constitution of the atmosphere through control of forest cover—reinforced the notion of conservation which provided solid ground for the emergence of forest policies in British colonies (Grove, 1995: 165). Thus by the mid-eighteenth century, imperial scientists were able to manipulate state policy by playing on the fears of an environmental crisis and from the mid-nineteenth century onwards, scientists were central actors in imperial development and became increasingly concerned about the long-term viability of natural resources in the face of intensive demand and use. Their work fed into the establishment of exclusive, protected zones for forests, wildlife, or watersheds and ecology acquired the status of not simply a 'science for imperialism', but a 'field science', which soon became tied to imperial conservation policies: both the concern to protect the species and to exploit natural resources more effectively and sensitively (Beinart & Hughes, 2007: 201 & 204). The present global conservationism movement, according to Grove (1995), is born out of the knowledge generated in European Botanical Gardens during the eighteenth and nineteenth century.

Along with this, production and dissemination of literatures in European like John Evelyn's *Sylva*, which speaks of 'forest science' and Shakespeare's *The Tempest*, which speaks of 'Edenic Island' contributed in the development of the idea of scientific forestry. The expansion of the Botanical Gardens and scientific societies and their journals also helped to stimulate the diffusion of environmental ideas which materialised and stimulated the notion of scientific forestry (Grove, 1995: 382).

Scientific Forestry in India

Scientific forestry is the systematic planting, cultivation and sustainable exploitation of woodland (Beinart & Hughes, 1997) based on strictly limited access to forests, which restricted local community access to local forests. The underlying idea was based more on long-term commercial timber production, aimed at converting the rich and diverse forests of India into a monoculture of high value timber for the British Empire (Bryant, 1996:213) and less on genuine concern for common good, a claim which the British Empire always made. Imported European Physiocratic and Romantic ideas were legitimised as scientific, modern, rational and

ecologically-minded, whereas local and indigenous knowledge[7] was labelled unscientific, backward, irrational and anti-ecological.

The long-term commercial production of timber was considered as scientific and subsistence-oriented extraction as unscientific. Some practices were considered more unscientific than others, and the degree of official disapproval depended on the threat that a given practice posed to commercial production or to what Scott calls 'fiscal forestry' (Bryant, 1995: 213, Scott, 1998: 12). The destruction of forests in India due to shifting cultivation[8] attracted the attention of scientists in Britain, which led to the strict regulation of shifting cultivation (Elwin, 1986, Brandies, 1994: 105). Shifting cultivation, along with grazing and forest fires, were considered unscientific and ecologically destructive. Thus according to most British officials, advanced Europeans had an obligation to manage the forests for the benefit and on behalf of the people and state (Ribbentrop, 1989, Bryant, 1995). The colonial foresters believed that they were doing a noble job for the British colonies, that they were stewards entrusted with the long-term maintenance of forest resources of the colonies (Bryant, 1996:174) and ultimately that the introduction of systematic forestry was beneficial to the rude forest tribes of India (Brandies, 1994: 120).

The colonial government argued that forest conserving is undertaken for the benefit of the people of India. For the Indian state, this is one of the primary reasons why forest conserving is necessary in India. Conservation can only be well-managed when the state endeavour to retain the most important forest lands in its hand. The ownership and control of forests in India by other proprietors will always be a challenge and difficult matter for the imperial government. Thus, Brandies proposed the idea of scientific forestry, according to which forests should be demarcated and reserved on the lines of European state forests (Brandies, 1994).

The theory of scientific forestry states that there is a basic contradiction between the local inhabitants and forests, and that the local economy is based on an unscientific exploitation of the forests. It was pleaded that to conserve forests, local peoples' hold and right over the forests should be restricted to the minimum, and to do this, Forest Departments were setup by the

[7] For more details on indigenous knowledge see Agarwal, 1995

[8] Shifting cultivation is a form of slash and burn agriculture mostly carried in hill slopes where land and forest are abundant. It is known by different names in different places such as *dhya, panda, jhum* etc. It is a predominant form of agriculture in the hills of the North-East India 95% of shifting cultivation in India is practiced. Shifting cultivation has been discussed in detail in Chapter Three. Also see Brandies, 1994, Ribbentrop, 1989, Elwin, 1986

colonial government to guard the forests (Joshi, 1984: 43). The first organised interest in forestry and timber in India reflected Great Britain's need to extract raw material from its colonies (Haeuber, 1995:50) and the forest was placed under a regular system, known as 'scientific forestry management' to ensure future supply because it was financially remunerative. The notion of guardians and stewards of forests, which the British propagated, was no different from the notion of 'White Men's Burden' or the 'Civilizing Mission' guided by the imperial agendas of colonization, and producing criminals overnight who resisted colonial polices.

Progress in scientific forestry was measured not only in terms of the number of teak trees extracted, but also in terms of the conformity of extraction to scientific methods and criteria. Progress was as much about tree-counting and mapping as it was about tree-felling (Bryant, 1996:171). This progress in forest conservation was a highly selective process, with the art of conservation being applied to mostly well-stocked and commercially valuable trees like teak, Sal etc. and the quest to maximise teak extraction and revenue at times conflicted with the aims of conservation (Bryant, 1996, Grove, 1995). The most important forest species in India was teak, known as the royal tree, because of its commercial value and durability. According to Brandies, what gold is among the metals, teak is among the tree species.

With the introduction of scientific forestry great success was achieved by the imperial government in the matter of the protection of teak and other valuable species of trees, and the beneficial effects manifest themselves in the improved conditions of the forest lands. Forests were also protected and conserved by killing their chief enemy i.e., grasses and eradicating weeds, commercially unwanted plants and also by checking forest fires (Scott, 1998). With the extension of laissez faire and the utilitarian model, agricultural cultivation was extended and the forest was diminishing. Systematic forestry became a necessity, and as a result, woodlands and forest lands came to be managed like gardens and parks. The colonial administration further argued that unless the government intervene and reserve forest tracts, many districts would further suffer (Brandies, 1994: 50 & 83). Thus the colonial administration, influenced by utilitarian discourse transformed the 'forests' into 'fiscal forestry'[9], whose value was measured in terms of its revenue yielding capacity and market value.

Several monoculture plantations were introduced and one of which Brandies frequently speaks is

[9] For a comprehensive discussion on 'fiscal forestry' see Scott, 1998

the Australian eucalyptus. The most important point was that planted trees must be financially remunerative and must pay back within a certain time and area. For this purpose, the science of silviculture and arboriculture, mainly of commercially suitable species, was introduced (Brandies, 1994). Monocultural practices were continued in post colonial India by introducing eucalyptus plantations in several areas under the scheme of social forestry programmes.

Colonially introduced ecological change in India before the mid-nineteenth century followed the pattern and experiences which had developed in other French and British colonies, namely Mauritius, St. Helena and St. Vincent. According to Grove, "In this way the experience gained in these island colonies exercised an important formative influence over the way in which environmental ideas were conceptualized and state conservation came to be developed in India" (Grove, 1995: 380). It was earlier widely believed that conservation ideas as deriving from a specifically North American setting, but, according to Grove, the available evidence shows that the seeds of modern conservationism developed as an integral part of the European encounter with the tropics and with local classification and interpretation of the natural world and its symbolism (Grove, 1995: 03). Indigenous knowledge, management and afforestation methods were more important to the evolution of East India Company's environmental policy than any set of ideas imported from outside India and it was only after the end of Company's direct rule in 1857, that German formulations held greater sway and conservation policy became more developed (Grove, 1995: 382). In other words, conservationist ideas developed when Europe the met the orient, and than disseminated to other parts of the world, including North America.

According to Siva, the clearing of forestlands for agricultural extension reflected the colonial conception of 'wastelands', and in general, colonial administrators saw unproductive land, including forestland as 'wasteland'. The criterion used to judge productivity was the revenue generating capacity of land (Haeuber, 1993: 51). For colonial administrators, to permit highly fertile land to remain idle and unplowed was wasteful, and any land either untilled or ungrazed was wasteland. Forestlands usually did not generate revenue through the production of exportable cash crops nor were they subject to the same taxation levied on agricultural lands. They were considered wasteland suitable only for agricultural extension. The period of massive deforestation commenced as the sub-continent was absorbed into the British Empire in the late eighteenth and early nineteenth century (Guha, 1996). The first organised interest in forestry and timber in India reflected Great Britain's need to extract raw material from its colonies for its

growing demands of naval and railway sleepers. Along with teak, the government monopoly spread to other species of trees as their commercial value was recognized and by 1865, rosewood, anjili, ebony and sandalwood were added to the list of species reserved for extraction and use by the colonial government (Haeuber, 1993: 50).

The Indian Forestry Department described 'settlement' as the procedure that fixed the matrix of rights and management as fluid procedure that was expected to adapt to changing circumstances (Sivaramakrishnan, 1999). Forest Department in India introduced continental principles of forest management such as minimum diversity, the balance-sheet, and sustained yield, which led to the eventual transformation of Indian forests along the lines of Germany and France (Rajan, 1999). With the demarcation and reservations by the colonial administration, forests were transformed from physical domains to contested social spaces to which different groups of people attached different meanings and it was these opposing ideas that clashed in the arguments that raged around grazing rights and shifting cultivation (Beinart & Hughes, 2007, Bryant, 2007). The practices of shifting cultivation and over-grazing were denounced as primitive, among the major causes of deforestation and soil erosion in India (Beinart & Hughes, 2007) and a greater obstacle to scientific forestry (Bryant, 1995: 67).

British claims to forests of course long preceded this legislation and restrictions enforced under the Indian Forest Act, 1878 affected all forest-dependent people, both tribals and caste Hindu. Fluid and flexible boundaries became fixed and village wastelands were in many places incorporated into state forests, which meant villagers lost free grazing and wood supplies. Some were demarcated and handed to local revenue collectors who allowed villagers under strict conditions (Beinart & Hughes, 2007: 273). Sundar (2007) asserts that forest reservation was perhaps the most drastic of colonial interventions and forest laws treated local people as predators, assumed to be involved in an unrestrained, senseless and indiscriminate destruction of forest resources whose counterpoint was the supposed restraint, logic, and planned preservationist goals of state conservators.

Guha and Gadgil's claim that colonial scientific forestry had nothing particularly 'scientific' about it is justified by the fact that the faster formal scientific knowledge grew, the faster deforestation accelerated, or where plantation estates were established, biodiversity was destroyed by introducing the monocultures of teak, Sal and other commercially valuable plants.

Even through science might have greatly enlarged the knowledge of physical and geographical processes, it failed to understand the ecological consequences of the human interventions that followed. Mahesh Rangarajan offers an important shift from standard arguments by suggesting that there was in fact little specifically 'colonial' about Indian scientific forestry because its roots and influences lay in European traditions and training. Indian scientific forestry was actually the parent of imperial forestry elsewhere and "there was…nothing unique or imperial about forestry in the British Empire" (cited in Beinart & Hughes, 2007: 125)

The colonial administration started large-scale deforestation in order to penetrate deeper into the remote and peripheral areas and augment its rule. Deforestation in the strictest sense meant the replacement of forests by non-forests (Flint: 1999) and large areas of jungle were destroyed in the name of vermin eradication and to deny robbers and other criminal elements their hiding place (Sivaramakrishnan, 1999, Mann, 1999). Thus the control of forest reproduction became the measure to control the subsistence practices of communities that inhabited the forests (Nongbri, 2003, Skaria, 1999). Between 1860 and 1947, changes were made with the introduction of formal forest management, the elaboration of a system of scientific forestry and finally the assertion of a strongly centralising forest regime (Sivaramakrishnan, 1999). All these laws and polices totally destroyed traditional systems of village management and alienated village people leading to the massive denudation of forests (Agarwal & Narain, 1989).

Hugh Cleghorn, together with Brandies was responsible for the introduction of scientific forestry in India (Beinart & Hughes, 2007: 115-116). Cleghorn was concerned about the depletion of teak which formed a high source of revenue for the imperial state and initially was of the view that local people need to be prevented from stripping the forests of royal teak, which would rob the state of its main source of commercial prosperity. Cleghron's view changed as he confronted the reality of forest protection and he admitted that strict conservancy based on scientific forestry would not work if it was 'too stringent' and 'too oriented' towards the interests of the imperial state.

Forest conservation was taken on by the colonial state in India as an accepted part of the role of colonial government and the emergence of conservation policies and laws can shed some light on changing notions of the responsibility and role of the colonial state during the first half of the nineteenth century. With the introduction of scientific forestry, the British India Empire, on the

one hand, promoted the extension of agriculture consequent upon the growth of population, but on the other access to forests was restricted, so as to ensure commercial exploitation and promote the rapid growth of the railways. From the early 1770s until about 1860, fluctuating demand for naval and military timber represented the most important commercial demand factor in British forest policy in India (Grove, 1995: 389). British forest policies in India aimed both to enhance production and to conserve the basic resource over a longer term.

According to Kumar, the colonial government's view on indigenous forest practices were largely shaped by the perceptions by different nations of each others' techno-scientific traditions and capabilities and the ideological feeling of superiority and inferiority (Kumar, 1996: 195). It becomes clear that the idea of scientific forestry developed from the long experiences and experiments of the Europeans with European forestry and the oriental botanical gardens which became a practical 'text' to assemble and classify species.

CHAPTER TWO
The Making of Forest legislations in India

> The art of government finds its first form of crystallization, organized around the theme of reason of state, understood not in the negative and pejorative sense we give it today, but in a full and positive sense: the state is governed according to rational principals which are intrinsic to it and which cannot be derived solely from natural or divine laws…
>
> Foucault, 1991

The process of making forest legislation initially through regulations and later on by statutory law attempted to throw the age-old ancient customs and laws into the backyard giving place to laws based on the English common law pattern. British officials like Lord Macaulay and Henry Maine rejected the ancient legal and political institutions as product of an 'idealistic imagination' and 'brahmanical superstition' and James Mill equally believed in the amoral and uncivilized character of Hindus[10]. In spite of denouncements, the British in India were forced to take into consideration local and traditional elements in the process of law making. Protective legislations laid down the broad parameters within which a regime of control could function effectively and efficiently (Nongbri, 2003). Colonial government in India also encouraged its officials to learn Indian languages and customs so that they can equip themselves better for the job of colonial state-making (Pathak, 2002).

The British attitude towards Indian customary and traditional rights as best typified by the Forest Act of 1865 and more pronouncedly in the Forest Act of 1878, wherein the local customs, practices, and their customary rights on the forests were neglected and in some cases adjusted to suit local demands, and these Acts exemplified sanctions that were imposed in the name of 'protecting and conserving the forests' (Hazra, 2002). The Physiocratic, Edenic, and Romantic roots of environmentalism in India were strongly reinforced by the writings of Von Humboldt in the early nineteenth century, who promulgated a new ecological concept of relation between man and nature based on Hindu philosophy (Grove, 1995:11) which later on influenced forest policies of the colonial government in India.

[10] Mill fervently believed in the amoral character of the Hindus and suggested that they are tainted with the vices of insincerity; dissimulation, treacherous, untruthful, to an excess which surpasses even the usual measure of uncultivated society. Yet they can improve themselves under the enlightened guardianship of Europeans and Europeans had a duty to civilise backward nations (Agrawal, 1997). Also see Cohn, 1997.

The term forest policy connotes the actions of a government for the preservation, maintenance, enhancement of forests and the optimum utilisation of forest resources during a particular period, to attain national welfare. In short, forest policy is a set of principles or guidelines in forestry for the welfare of the nation as a whole. It was difficult to ascertain the point of the optimum utilisation of forest products, while enforcing the rhetoric of conservation. The idea that the conservation of forestry was not to adversely affect government revenue became the basis of reckless exploitation for a long time, and in order to raise revenue for the British crown, all principles were generally sacrificed. The concept of national welfare, according to Jha, was practically to promote the welfare of the British crown (Jha, 1994). By around 1860, according to Guha and Gadgil, Britain emerged as the world leader in deforestation, devastating its own and forests of colonies to draw high-class timber for shipbuilding. The dominant thrust of agrarian policy was to extend cultivation even at the cost of forests to maximise revenue (Guha & Gadgil, 1997). Along with the extension of agriculture, reservation of forestland followed in many parts of India.

British forest consciousness in India developed around the middle of the nineteenth century, when in keeping with the bourgeois tradition towards forests, the British turned towards maximising revenue. 'Fiscal forestry' and 'economic botany' were the major motives underlying colonial organised forestry in colonial India, expressed especially in the search for commercially profitable crops (Scott, 1998, Tucker, 1999). Around the middle of the nineteenth century, a commission mandated by the colonial administration prepared a report, concluding that Indian forests were being destroyed mainly due to local peoples' mismanagement (Agrawal, 1995, Hazra, 2002). The constant production of powerful discourse around the inability and ignorance of the forest dwellers to protect forest resources provided legibility to colonial administrators to intervene in the forest conservation business for the benefit of forest dwellers in particular and people of India in general.

The Forest Act of 1865

The first attempt to assert state monopoly over forests was done through the Forest Act of 1865 which facilitated the acquisition of those forest areas earmarked for railway supplies. Immediately, the search commenced for a more stringent and inclusive piece of legislation. The Forest Act of 1865 was replaced after a prolonged internal debate within the colonial

bureaucracy by a more comprehensive piece of legislation in 1878 (Guha & Gadgil, 1997), which strongly advocated the exclusion of people from commercially valuable forests.

The pace of railway expansion from 1394 kms of track in 1860 to 58,658 kms in 1910 and the massive destruction of nascent forests brought home forcefully the fact that India's forests were not inexhaustible and the awesome task of checking deforestation of past decades required checking of reckless and wasteful exploitation of forests by private enterprise and local forest dwellers. To check this, the first and foremost aim of the British government in India was to create legal mechanisms to assert state control over India's forests. Thus in 1862, the Governor-General of India called for the establishment of a Forest Department that could ensure the sustained supply of timber required for the development and expansion of the railways (Guha & Gadgil, 1997).

The Act of 1865 specifically declared certain activities illegal and aimed at restricting the access of the local people in the forests which became the *modus operandi* for establishing state-property rights. Commercial considerations were the bedrock on which the legal system for forests was built and on which the machinery of the Forest Department operated. According to Guha, the Forest Act of 1865 soon became controversial in government circles and many officials critical of the Act argued that the major deficiency involved was the extent of state control over forests granted by the Act (Guha, 1996). The Forest Act of 1865 provided for the protection of forest areas only after they had been selected and declared government forests. Moreover, the definition of forests in Section 2 of the Act was considered overly narrow and forest was defined as 'land covered with trees, brushwood and jungle'. Critics of the Act felt that the government should possess the power to classify and demarcate any land as forest, subjecting it to the provisions of forest legislation and turn the customary use of forest as 'privilege' and not 'right' (Haeuber, 1993: 54).

The Forest Act of 1865, according to Brandies was incomplete in many respects, the most important omission being the absence of all provisions regarding the definition, regulation, commutation and extinction of customary rights (Guha & Gadgil, 1997). A protracted debate on a new Forest Act started about how best to accomplish this separation of rights, which led to the emergence of distinct positions within the bureaucracy. The first group to which Guha calls "annexationist", held out for nothing less than total state control over all forest areas. The

bedrock of the “annexationist” position was the claim that all land not under cultivation belonged to the state. This position was championed by famous British forester Baden-Powell, who made a clear distinction between ‘rights’—as ‘strict legal rights which unquestionably exist, and in some instances have been expressly recorded in land settlement records’, which has to be always provided in writing—and ‘privileges’—as concessions of the use of grazing, firewood, small wood, etc., which are not claimable as of legal right, and was always granted by the state for the convenience of people (Rajan, 1999, Guha & Gadgil, 1997). Baden-Powell further went on to claim that the ‘right’ of the state over waste and forest area is among the most ancient and undisputed of rights in oriental sovereignty and thus the ‘right’ of oriental governments in forests passed on to, and was accepted by, the British government for the betterment of its subjects (Guha & Gadgil, 1997) and this is what Section 2 of the 1865 Forest Act provided.

Baden-Powell pushed for strict state control of forests and exclusion of local inhabitants, whereas Brandies favoured a middle way, preferring a policy of selective annexation of key areas, while respecting village rights so that they might not revolt. Baden-Powell declared that the colonial state had acquired through conquest sovereign rights over all forests and uncultivated land, and local people’s use them did not signify possession of legal rights but privileges that the state could withdraw at will. He strongly put his stamp on the Indian Forest Act of 1878, which demarcated and defined the proprietorship of forest lands, beginning the process of the marginalisation of and discrimination against indigenous forest users that rose to its climax in various protest movements (Beinart & Hughes, 2007: 121, Bryant, 1996: 172). But unlike Baden-Powell, Brandies insisted that customary forest access by settled agriculturists was a ‘right’ and not a privilege (Bryant, 1995: 60). The colonial usage of “the term ‘right’ was rooted in a state-dominated social science discourse and therefore legal rights in this case were nor universal natural rights, inheriting in the individual, neither ‘property rights’ in the strict sense of the term—but rather local ‘rights’ defined by the state recognition of particularistic usage and customary community” (Gilmartin, 1994: 1141).

Struggle over the control of natural resources and private ownership were not new in India, but what was new during the colonial regime was the introduction and impact of western legal forms and principles on the distribution of rights to the land. The colonial government rejected the “idea that nomadic and transhumant communities should have the right to roam over more land than they were perceived to need or use, and therefore pressure was built upon them to settle

down, cultivate, take up wage labour, and pay taxes" (Beinart & Hughes, 2007:270). This was true for many nomadic communities who were forced by powerful states to settle, because it served the dual purposes of the acceptance of the state's legitimacy and sovereignty over the population, which had once escaped state's gaze, and secondly, once the state's legitimacy was accepted, the people were forced to pay various kinds of taxes and levies which generated revenue for the state.

There were, broadly mainly two sets of opinion regarding the ownership of forests in colonial India. The first view recognised the right of the forest dwellers over forests, while the other stressed the right of the state over forests and wastelands. Brandies, considered as protector of local rights (Haeuber, 1993, Jha, 1994, Guha,1996), because of his insistence on customary rights was, in fact, according to Pathak, grounded has ideas in the political will of the colonial state to reorder, control and regulate usufruct rights. Baden-Powell, firm on the issue of customary land rights, also had to make adjustments in his ideas in the formulation of the forest laws. The forest laws that were enacted were a result of the interaction between the experiences of the forest officials, local realities and the colonial needs (Pathak, 2002). Thus the law the British administration introduced in India were selectively developed and strategically deployed to achieve certain desired and specific results. According to Nongbri, 'the colonial project was not one that had been built upon the edifice of processes like forest management and regulatory mechanisms and strategies of natural resource control alone. The management of natural resources did nevertheless aid the British in the task of empire building, but control over various strategic natural resources were far from being 'direct', rather control was contested, more often in subtle ways, and negotiated with at different levels' (Nongbri, 2003).

The Forest Act, 1878

The Forest Act of 1865 Act was replaced by a much more repressive Act in 1878, because the earlier Act was thought to be 'inadequate' given the commercial considerations of the empire. All most all the provisions of the Forest Act of 1865 were found defective, and debate started within the bureaucracy to immediately replace them, except Section 8 of the Act, which according to Baden-Powell, the chief architect of the Forest Act of 1878 gives one satisfactory power in the Act, and must be maintained in the new law; i.e. arrest without warrant is absolutely essential (Hazra, 2002).

The Forest Act of 1878 was a comprehensive document, and entirely different, both in form and content, compared to the previous legislation. While the 1865 Act had only 19 Sections, the 1878 Act had 83 Sections, divided into 14 Chapters and a Preamble**.** For the Forest Act of 1878, establishment of absolute state property rights and settlement between the state and its subjects over their respective rights represented the chief hurdle to be overcome. Based on Baden-Powell's distinction between 'rights' and 'privileges', the Forest Act of 1878 by one stroke of the pen, attempted to obliterate customary use of forests by rural populations. The 1878 Act was extended to all the provinces except Madras, Burma, Ajmer, Coorg, Berar, Baluchistan, and the Hazra district in Punjab. By 1890, all these provinces passed their own Forest Acts modelled on the Indian Forest Act of 1878, where all the Forest Acts provided for control of forests not belonging to the state (Rajan, 1999).

The establishment of absolute state property rights over forests along with the legal separation of customary rights, became the main objectives of the 1878 Act, and, towards this end, forests were classified into reserved, protected and village/communal forests. This classification and demarcation, an inherent feature of the managing of forests, was based on administrative grounds guided by the motive of 'fiscal forestry' (Guha & Gadgil, 1997, Scott, 1998) which laid the foundation for the development of scientific forestry both in the presidencies and in other parts of India (Skaria, 1999). The Act also greatly enlarged the punitive sanctions of the forest administration, closely regulating transit of forest produce and prescribing penalties for transgressions (Flint, 1999).

In reserved forests, the land as the absolute property of the government and it consisted of compact and valuable areas, well-connected to towns, which would lend themselves to easy and sustained exploitation. In the second category, the so-called 'protected forests', rights were recorded but not settled. Control was firmly maintained by outlining detailed provisions for the reservation of particular tree species, but villagers were allowed to use certain forest species for their use. With the rise in commercial demand, protected areas were gradually converted into 'reserved forests' where the state exercises fuller control. What distinguished reserved forests from protected forests was, that "in a reserved forest everything is an offence that is not permitted; while in a protected forest everything is an offence that is not prohibited" (Gadgil & Guha, 1997). In the third category, the village forests, where theoretically the government only

held the right of forest management, in practice the government strictly controlled the sale and barter of forest resources (Ribbentrop, 1989, Guha & Gadgil, 1997, Tucker, 1999 Hazra, 2002).

The reserved/protected classification was guided by the goal of profit from timber, and thus in the beginning, only those areas forested by high value species were designated as reserved forests. However, with the passage of time the demand for timber increased and areas under the protected forests were gradually converted into reserved ones. According to Tucker, reserved forests were managed primarily to protect the natural forest or to produce commercial timber; while protected forests were intended to meet nearby villagers' needs as a higher priority (Tucker, 1999).

In 1894, the government of India issued a circular, which formed the basis of future forest policy of British India. It declared forests of India as a property of state (Hazra, 2002, Jha, 1994) and classified forests on the basis of its climatic implications, commercial value, and pasture lands. According to Sivaramakrishnan, by the middle of the 1890s the progress of demarcation, reservation and systematic timber exploitation had made forestry a valuable revenue source. The 1894 Forest Policy also made provisions for the relinquishment of forest area for agricultural production on some conditions. The primacy accorded by the resolution to agriculture in evident from the fact that, wherever demand for cultivable land existed, it could only be supplied from forest lands (Sivaramakrishnan, 1999). Some of the restrictions of 1878 Act which intended to protect reserved forests from degradation were directly contradicted by the provisions of the 1894 land use policy document, encouraging direct forest clearance for agriculture (Flint, 1999).

The Forest Act of 1927

The colonial administration wanted to do away with the ambiguous language used in previous forest legislations, intended to introduce a single piece of legislation to do away with all kinds of ambiguity; the Forest Act of 1927 was promulgated, which according to Vasan, became the basic reference point for the post-colonial forest policies in India (Vasan, 2005). A clear scrutiny of 1927 Act, according to Hazara, reveals that, there were only minor differences between the Forest Acts of 1878 and 1927 and, it was largely based on the previous, especially the 1878, Act. The Act was timber oriented and aimed to consolidate the law relating to forests, the transit of forest produce and the duty leviable on timber and other forest produce. The Act clarifies that no person can claim a right to private property in forestland merely because he and his forefathers

lived there for centuries. Section 3 of the Indian Forest Act of 1927 starts with the assumption that the common land that the forest people inhabit is the property of the government, and the latter is privileged in terms of access to forest produce (Hazra, 2002, Guha, 1996, Guha & Gadgil, 1997).

The Act does not depict forests as habitations where humans live in harmony with nature and nor does it speak of biodiversity or the relevance of conservation in the maintenance of forests. Section 2 of the Act does not define 'forests', and simply leaves it to the whims and fancies of the government or 'whatever the government notifies'. The definitions of 'forest produce' and 'tree' are economic in nature because, the Act enlisted only those forest products and plants which had economic values (Hazra, 2002). By looking at all these provisions of the Act, it becomes clear that exploitation and appropriation of forest resources, or what Scott calls 'fiscal forestry' was the ultimate aim of the 1927 Act.

The National Forest Policy of 1952

With the changing economic conditions and with the aim of removing the shortcomings of the 1894 Act, it was strongly advocated that post-independent India formulate a national forest policy (Jha, 1994). The Government of India came up with the Forest Policy of 1952. The prime concerns of the forest department prior to the 1952 Forest Policy was to increase revenue generation from the forests, while the Forest Policy of 1952 added the dimension of increasing the forest cover in 33 percent of the total geographical area. The composition of forests did not matter while increasing forest cover. The eucalyptus plantations under the aegis of social forestry programme were started in all kinds of land throughout the country and forests were recognised to serve the needs of the newly emerged paper, ply and varnish industries which primarily depended on forestry for their sustenance and growth.

The 1952 policy presented the functional classification of forests, but was more comprehensive in classification than the 1894 policy. It classified forests into-

(1) *Protected forests* consisting of those forests which were to be conserved to attain physical and climatic balance of the country.

(2) *National forests* which were to be conserved to meet the requirements of timber for Indian defence, communication, wood-based industries, and for many other purposes.

(3) *Village forests* to fulfill the needs of rural population by supplying small timber, fuel wood, fodder, grazing grounds etc.
(4) *Tree lands* to be promoted ordinarily in areas lying outside the control of forest management.

Tree lands was included as a new classification in the Forest Policy of 1952 which aimed to attract proper attention for due management and conservation of all kinds of forests, irrespective of their function and the establishing of protective forests and the preservation of existing ones were recommended. The policy also recommended the setup of sanctuaries and national parks to save rare species and maintain biological diversity and it was accepted that forestland would not be relinquished for agriculture purposes (Jha, 1994, Mukherjee, 2004). We see here that the Forest Policy of 1952 is similar to and a continuation of the colonial forest policies in many respects. The policy recommended the establishment of sanctuaries and parks and maintained the functional classification of forests according to their use value and also condemned shifting cultivation as an age old-practice which needs to be controlled.

In the post-independence period, no further amendments were made to the basic structures of the Forest Act of 1878 and the Forest Policy of 1894, which spoke about the 'rights' of the rural peoples over forest and forest produce which turned into 'rights and privileges', and was accorded legal status in the Indian Forest Act 1927. The Forest Policy of 1952 turned the terminology of 'right and privileges' into 'rights and concessions' without changing the meaning of the term. The colonial government turned land without individual titles into state property, and the forest laws turned the forest dwellers into 'encroachers' (Guha & Gadgil, 1997, Hazra, 2002). The Policy of 1952 also attempted to do away with shifting cultivation by declaring it as an age-old, wasteful practice injurious to forests, and forced mobile populations to settle and practice sedentary agriculture. Like the colonial forest polices, the Forest Policy of 1952 recommended limited facilities for grazing for animals and an unreasonable fee was also charged.

The Forest (Conservation) Act of 1980

Over the years, forests in the country suffered serious depletion and the process of deforestation intensified. According to the estimates of Forest Department, India lost around 3.5 million ha of forests between 1951 and 1972 (CSE, 1996), and tree cover declined from 70 million ha in 1950 to 35 million ha in 1990 (Hazra, 2002). Forestry, which was in the state list earlier, was included in the Concurrent List after the 42nd Amendment of the Indian Constitution in 1976 (Jha, 1994) and within a short span of time the Government of India passed Forest Conservation Act of

1980. The Act was promulgated to stop the use of forestlands for non-forest purposes like roads, dams and buildings, which affected forest cover and the central government became the sole authority for granting such permissions. The Forest (Conservation) Act, 1980 was amended in 1988, which stipulates concurrence of the Union Government for diversion of forestlands for non-forestry purposes with the provision of compensatory afforestation. Conservation was coined in the 1988 policy as a comprehensive term, which included 'preservation, maintenance, sustainable utilization, restoration and enhancement of the natural environment (National Forest Policy, 1988).

Like it predecessors, the Forest Policy of 1988, considered grazing and other rights as harmful and were to be relocated with the carrying capacity of forests. Cattle were largely seen as a hindrance in forestry, and thus they were also classified as more and less harmful (Rangarajan, 1999, Bryant, 1996). Para 4.4 of the policy stated that shifting cultivation adversely affected productivity of the land as well as environment. Every effort were made to contain shifting cultivation within affected areas (Jha, 1994). Like the 1952 policy, the Forest Policy of 1988 paid special attention to forest based industry, and divided forests into wood-based, forest plantation and tree-based industries and, forest based miscellaneous industries (National Forest Policy, 1988).

The Forest Policy of 1894 classified forests into protective, productive and social forests, but failed to provide opinion on the geographical coverage of forest. It was highlighted in the Forest Policy of 1952, which classified forests into protective, national, village, tree-lands, but it also did not provide any time period for it. Finally it was the 1988 Forest Policy that the provided timeframe and extent of area to be covered under forest (Jha, 1994: 111). The Forest Policy of 1894 had laid guidelines for the conditional relinquishment of forest lands for agricultural purposes, which had harmful affects on forests and Forest Policy of 1952 laid down guidelines to stop diversion of forest land for agriculture purpose. The Forest Policy of 1988 stated that projects causing diversion of forest lands must provide adequate financial provisions for adopting compensatory afforestation (National Forest Policy, 1988).

The creation of a government forest service in India in the mid-nineteenth century marked an important watershed in the history of British colonial forestry, which set in motion a programme to change systems of forest management in the sub-continent and recast them in the continental

traditions of forest management like Europe. Laws restricting resource use were passed, silvicultural and afforestation systems inaugurated and new approaches to forest utilisation launched and regimes for protecting forests from natural and human destruction were established (Guha & Gadgil, 1997, Rajan, 1999). At the peak of its power, the Indian Forest Department directly controlled around 1/5 of the land area of South Asia. The influence of Christopher Bayly in particular has encouraged some historians to treat colonial rule not as a historical watershed in South Asian history, but as a period of institutional and economic continuities with the pre-colonial period, especially the Mughals (Sivaramakrishnan, 1999).

Guha contends that organised forestry in colonial India developed in response to the revenue and strategic needs of empire. Further, scientific forestry was basically commercial forestry oriented at the maximizing of revenue which in due course of time destroyed the coherence and stability of the society (Guha, 1996, Guha & Gadgil, 1997). According to Sivaramakrishnan (1999), Guha's concentration on the post-1864 period in his analysis of the discourse of colonial forestry led him to omit the previous thirty year period that had actually been critical to the development of British ideas about forest conservation and, Skaria (1999) says that, Guha is dismissive of the claims of organised forestry to a conservationist agenda.

In contrast to Guha, Grove (1995) has argued that the roots of Forest Department practices lie principally in the desiccationist movement and most of those who played a crucial role in setting up Forest Department in South Asia were not only botanists and medical men but also desiccationists. On the other hand, Skaria (1999) says that, organised forestry was the blend of desiccationism and commercial considerations, and the accompanying notion of the rational use of forests, which formed the basis for Forest Department practices. Desiccation and timber conservancy represented two distinct traditions in early nineteenth century India, where the latter provided the actual means by which the few timber plantations and forests under colonial control managed and the former was an influential intellectual position, advocating for greater control of all forest in colonies.

The question of time frame remains debatable, especially in view of the fact that Guha and Gadgil have suggested that the pre-colonial period may be seen as the "golden age" of ecological harmony. According to Guha and Gadgil "despite the grave inequalities of caste and class, pre-colonial Indian society had a considerable degree of coherence and stability. This permitted a

rapid turnover of ruling dynasties, without major upheavals at the level of village. . . . even the Mughals were unable or perhaps unwilling to radically alter the existing patterns of resource use and the social structures in which they were embedded" (Guha and Gadgil,1997). Grove argued that deforestation had reached significant levels in the pre-colonial period, and that changes in the colonial era were only a culmination of trends from the earlier period (Grove, 1995). Rangarajan argues that, Grove overlooks the fact that not only was there a qualitative change as far as deforestation is concerned, but the entire social and political framework within which the colonial regime functioned had subjected the natural resources of the subcontinent to the demands of the larger compulsions under which the colonial regime operated (Rangarajan, 1999).

With the passing of Madras Forest Act of 1882 the limits of public forest was ascertained by careful enquiry, and it was one of the first and most important steps taken to define the forest proprietorship of the government. The Indian Forest Acts of 1865 and 1875 marked the real start of state appropriation of forests, although the laws did not apply all over British India. Under the Forest Act of 1865, state control of forests was limited and user rights not totally abolished, and under the Act of 1878, forests were reclassified as either reserved or protected, and moved away from recognising local people's access and usufructuary rights (Joshi, 1984: 117).

The various forest laws in India make it quite clear that the object of a forest settlement is, in the first instance, to fix and define the legal status and extent of the proprietary rights of the state in any forest or wasteland, constituted or declared to be forest within the meaning of the forest laws, secondly, to arrange for the exercise or communication of adverse rights so recorded, in order to allow of the property being managed with the view of obtaining the best possible return, both for the present and in the future, for the general public (Ribbentrop,1989, Grove,1995), and, thirdly, the extension of forest policies facilitated the extension of the right of the sovereign to new areas and facilitated in the process of colonial expansion**.** It becomes clear that forests policies passed during the colonial period guided by fiscal forestry also facilitated the colonial empire to extend its control over forest populations who were brought under the sovereignty of the British Empire.

The conservation of forests was an outcome of the extension of colonial administration deeper in to the peripheral areas to generatate more revenue for the expanding empire. The rhetoric of

conservation, which was supplemented by the production of a powerful colonial discourse, provided the colonial administration with a legitimate right to intervene in local affairs, which in turn extended its influence to once unadministered or lightly administrated areas and brought them into the direct control of British Empire. In short, the rhetoric of conservation became a tool for the ‘governmentalization’ of the British Empire, in the everyday practices of the forest dwellers.

CHAPTER THREE
Forestry in North-East India

> "The responsibility for the tribal areas also is largely that of the central government though in many places it is shared with state government….they cannot be treated just as outlaying regions. They want special policies and special care. We have to help them to develop, but to develop on their own lines. They must not have a feeling of any imposition or of any suppression of their own way of life….it is right and natural that the Assam government should be kept in close touch with happenings there, apart from military developments which have to be kept secret. The whole matter requires tactful handling".
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> Jawaharlal Nehru's letter to Governor of Assam, Jairamdas Doulatram in 1952[11]

North-East India, also known as North-Eastern Region (NER), comprises eight states: Assam, Arunachal Pradesh, Meghalaya, Manipur, Mizoram, Nagaland, Tripura and Sikkim. The region provides shelter to people of various ethnic affiliations having diverse social and cultural practices. There is a rich assembly of tribal cultures and communities with more than 130 major tribes which is approximately one-third of the total number of listed tribes in the whole of India is to be found in this region (Kar, 2003: 228). Some major tribes in the region are the Mizos, Khasis, Garos, Nagas, Mikirs, Kukis, Miris, Nishis, Abors, and Hmars. Diversity is a characteristic of the tribal population in the region where each tribe speaks different languages and differs widely in their ways of living (Burmon, 1977, Goswami, 1984).

The identification of North-East India as a region is primarily seen as a geo-political accident bearing upon international development (Chaube, Munshi and Guha, 1975, Baruah, 2003 and 2005)[12]. The term North-East generally used in official lexicon and also in some academic circles has often been criticized due to its centralising and hegemonic tendencies. North-East is the only region in the country where a group of state is officially designated as a region, and the official focus is more on region than a particular state. My use of the term 'North-East' India or region does not in any way comply with the official use of the term, rather my use the term North-East

[11] Cited in Sharma, SK and Sharma, U (2006) Documents on North-East India: An Exhaustive Survey. Mittal Publications. New Delhi

[12]The designation of official region of North-East India does not mean that it corresponds with people's spatial imagination; rather it was largely a creation in the post-china war 'cosmetic federal' regional order. The colonial usage of the phrase 'North-East' refer to what is now Arunachal Pradesh (the erstwhile North Eastern Frontier Agency). Ironically in its postcolonial usage the term Northeast has been extended to include a wider region (Baruah, 2005: 40).

includes only three states, Assam, Arunachal Pradesh and Meghalaya, keeping in mind the distinct and heterogeneous nature of each state, and tribe with no intention to homogenise them. The term North-East has been used for the convenience of this dissertation, keeping in mind the distinct and heterogeneity of each state and tribes.

Unlike other parts of the country, the North-East stands unique for having separate land tenure systems compared to the rest of India, where 53 percent of the forestland is owned by individuals and communities. Forests of the District Council, village communities and private ownership in different States of the North-East have different status and management (National Forest Commission, 2006). In a state like Meghalaya, private ownership is as high as 88 percent of the forested land. There also exists inter-state border disputes among the North-Eastern states and most of these border areas are forest lands which do not come under any form of management (Upadhyay and Mishra, 2004).

Forest conservation policies in NER cannot be understood independently without referring to their historical development with the traditional institutions of district council, village council, community forest management, indigenous politics, shifting cultivation and finally the Supreme Court's *Godavarman Case* of 1995. In this chapter, an attempt has been made to understand recent developments in forest politics by exploring the historical past, what Sivaramakrishnan (1995), calls 'imagining past in the present politics'.

The Forest (Conservation) Act, 1980 passed by Parliament would not perhaps apply to the State of Mizoram and Nagaland, but was made applicable with a legislative and executive order of the State Government. In the State of Assam and Arunachal Pradesh, generally, all Acts of Parliament apply, except as modified for the Sixth Schedule Areas of Karbi Anglong and North Cachar Hills (National Commission of Forest, 2006).

Forest Administration in North-East India

Forest administration in the NER is different from other parts of India because of the vast amounts of forests under 'community control', and also because of its socio-political milieu. Unlike other regions of India where the Forest Act of 1927 is applicable, in the North-East, the Assam Forest Regulation of 1891(AFR) is the dominant law, applicable to almost all the states in the North-East with minor changes to suit the local circumstances. Out of seven, four North-Eastern states are "Scheduled States" under the Sixth Schedule of the Indian Constitution, where

Article 244 (2) of the Indian Constitution states that provisions of the Sixth Schedule apply to the States of Meghalaya, Assam, Mizoram, and Tripura. For remaining states; the Constitution has provided special provisions for administration (Upadhyay and Mishra, 2004).

Two significant administrative classifications during the British regime are the demarcation of the frontier districts from other districts of the North-East by the declaration of certain areas as 'Scheduled Areas'[13] and the introduction of what is known as the 'Inner Line Permit'[14]. The Bengal Eastern Frontier Regulation Act, 1873, made it lawful for the state government to prescribe the inner line pass in certain districts and no mainland Indian was allowed to venture beyond a prescribed 'line' without an 'Inner Line Permit' under the hand and seal of the Chief Executive Officer (CEO) of the district. The Act also made it illegal for anyone who is non-native of the districts, to acquire any land and natural resources beyond the said inner line without the sanction of the state government or the officers appointed by the state government on their behalf. The colonial government by the introduction of inner line pass tried to curb the influence of the non-natives in the region, which also prevented the dissemination of nationalistic ideologies and thus the colonial government was able to govern it separately (Upadhyay and Mishra, 2004).

District Councils

The Schedule Districts Act of 1874 was the beginning of tribal administration and probably one of the first measures adopted to deal with the North-East which empowered the executive to exclude Scheduled District areas from the normal operation of any ordinary law. The 1874 Act declared the 'Paragana of Manipur' and the province of Assam 'Scheduled Tracts' followed by suggestions from the Montague-Chelmsford Report of 1919 that political reforms contemplated

[13] The 'Scheduled Areas' are dealt in Part V and VI of the Indian Constitution. For the purpose of my argument I have dealt with the Sixth Schedule. The Sixth Schedule deals with the states of Assam, Meghalaya, Mizoram and Tripura. According to Sundar, these areas required different sets of laws, owing to the fact that they had been isolated by government policy to a greater extent than other tribal areas in the country and were predominantly inhabited by tribes whose lifestyles were quite different from rest of India (Sundar, 2007: 184). The ethos of the Sixth Schedule, according to Roy Burmon, is self-sufficiency and autonomy in certain areas of the North-East through the establishment of the Autonomous District Council and corresponding levels of Autonomous Councils (Roy Burmon, 1994: 55). Also see Upadhyay and Mishra, 2004, Baruah, 2003 and 2005.

[14] 'Inner Line Permit' or 'Inner Line Pass' as it is called, is a legal permission which is compulsorily required for a non-native person to visit certain areas of the North-East. In 1873, The Bengal Eastern Frontier Regulation Act made it compulsory for the people of mainland India to obtain an 'Inner Line Permit' in case they wanted to visit certain districts like Kamrup, Darrang, Nowgong, Sibsagar, Lakhimpur, Garo Hills, Khasi Hills, Jaintia Hills, and Naga Hills of North-East India.

for the rest of India should not be made applicable in these areas as they were too 'backward' and 'primitive'. Thus the Scheduled areas of North-East were excluded from the purview of the reforms and were administered directly by the heads of the provinces (Upadhyay and Mishra: 2004).

The Government of India Acts of 1919 and 1935 classified these areas into two different categories; 1) Total Exclusion, and 2) Modified Exclusion. Totally excluded areas were considered to be so backward that they were totally excluded from the scope of reforms and suggested that neither the centre and nor the provincial legislature had power to make laws for these areas, all powers must be vested with the governor of the province. Under this Act, the Garo Hills and Lakhimpur Frontier Tracts were declared backward areas. Modified exclusion was proposed for areas which were not so backward. The report suggested that the highly autonomous nature of the Scheduled areas, under the loose control of the governor would not be a solution for the long-term, and it would be necessary to educate people in tribal areas of the North-East to become self-reliant (Upadhyay and Mishra: 2004).

Later on the Act of 1935 classified these areas slightly differently into 'excluded' and 'partially excluded'. The 'excluded areas' came directly under the personal rule of the governor and the 'partially excluded' areas under the ministerial responsibility with the governor having the power to overrule the ministers and no central or state law was valid in the 'partially excluded' areas unless with the authority of governor (Upadhyay and Mishra: 2004). The North Eastern Frontier Agency (NEFA, presently Arunachal Pradesh), the Mizo hills district, the Naga Hills district, and the north Cachar hills subdivision came under 'excluded areas' and the Garo hills, the Mikir and the united Khasi and Jaintia hills, came under 'partly excluded areas' (Chakrabarti, 2005: 244).

In post-independent India, based on the recommendations of the Bordoloi Committee, 1935 (headed by Gopinath Bordoloi), certain tribal areas were designated as Sixth Schedule Areas and a special system of administration for these areas was incorporated in Article 244 (2) of the Indian Constitution (Sundar, 2007, Upadhyay & Mishra, 2004). The provisions of the Sixth Schedule applied in the administration of the tribal areas in the States of Assam, Meghalaya, Mizoram and Tripura and the Sixth Schedule provided for the designation of the tribal areas of Karbi Anglong District, North Cachar Hills District, Khasi Hills District, Garo Hills District,

Jaintia Hills District, Tripura Tribal Areas District, Mara District, Chakma District and Lai District as 'Autonomous Districts'. The Schedule also vested the governor with the discretion to further divide the areas into 'Autonomous Regions' if there were different Scheduled Tribes in an autonomous district (Upadhyay and Mishra: 2004).

The clauses in the Sixth Schedule gave local people the right to manage land and forest in a sustainable manner (Kumar, 2005, Baviskar, 1997) and thus a number of areas had been declared as Autonomous Districts in many North-Eastern states within the state structure, which can be broadly considered as areas of special administration under the aegis of the District Council, which governs the administration of these regions. It is assumed that such areas are best left in the hands of the local people who know their lands and thus should manage their resources in accordance with local practices rather than formal state machinery. Thus, a substantial portion of forests in the Scheduled States of Assam, Meghalaya, Mizoram and Tripura are administered directly or indirectly by District Councils and similarly in the non-Scheduled States of Arunachal Pradesh, Manipur and Nagaland, traditional village level institutions control a major chunk of forest areas. Because of the diverse ownership and management of forests, according to Upadhyay and Mishra (2004), developmental agencies[15] working in the region, advocate a strong institutional set-up at the level of each institution responsible for forest management, with technical know-how from the state administration.

The NER is endowed with a wide range of physiographies and eco-climatic conditions and the rich forests in the region are extremely diverse in structure and composition which, after the Western Ghats and the Andaman and Nicobar Islands forms the main region of tropical rain forests in India. It is acknowledged to be one of the 'hot-spots' of biodiversity in the world (Karlsson, 2005, Baruah, 2005, National Forest Commission, 2006) and thus offers opportunity for a range of research and conservation activities which are being carried out across the region by many national and international agencies with funding from global donor agencies[16].

[15] World Wide Fund for Nature and Community Forestry International are some of the important agencies active in the NER.
[16] The Mac Arthur Foundation and United States Agency for International Development (USAID) are among the major funding organisations supporting community forestry in North-East India.

Community Participation

Due to its unique legal history in comparison to mainland India, community forestry in the NER reflects community ownership and direct control of forests, and the most significant forest law, i.e. The Indian Forest Act, 1927, makes it clear that the entire reserved and protected forest category which forms the major part of forests, is under the proprietary regime of the government. According to, Upadhyay and Mishra (2004), the only exception to this trend was the North-Eastern states, which are under the Sixth Schedule of the Constitution and where the Assam Forest Regulation Act, 1891 is applicable.

With regard to community participation in the management of forestry, the role of the state has changed a great deal. According to Kumar, in the past, forests were primarily managed by the state for generating maximum revenue from the sale of timber, but the emphasis has now shifted to resource conservation and people's participation in forest management. The centralised management of natural resources, based on a culture of exclusion, led to a series of policy changes in the recent past that provided an ever-widening democratic space to local communities for managing natural resources and thus Community Forest Management (CFM) is put forward as an alternative to state control, which is, in a way, trying to "reverse the legacy of centralized system of natural resource management" (Kumar, 2005). Many national and international organisations, including the World Bank, propagate similar arguments to save forest resources. A critical analysis of CFM raises many questions; the issue of CFM becomes more important in the case of the NER, where, under the aegis of the Sixth Schedule of the Indian Constitution, the Autonomous District Councils (ADC) are empowered to manage forests in the region and, unlike rest of India, communities have always owned and managed forests in the region. In the NER the state in the name of decentralization has created new institutions of ADCs, which govern forest in the name of community. It becomes clear that according to requirement of the modern state-making, the state has dispersed its power of direct control into indirect control by creating new institutions, especially ADCs.

It is generally believed that most of the forests in the NER are community owned and controlled by traditional laws, which give more rights to local communities in the management of forests in comparison to other parts of India (Upadhyay and Mishra, 2004, Sinha, 1993, Xaxa, 1999) but the actual status of forests in the NER is as questionable as that in any other part of India. In the famous case, *T.N. Godavarman v/s Union of India and Others*, the Supreme Court of India

passed several strictures to the various state governments of the North-East for large-scale destruction and deforestation (Upadhyay & Mishra, 2004). The judgment imposed centralised state control over most forest resources, seriously violating the autonomy of tribal communities previously given to them by the Sixth Schedule of the Indian Constitution (Nongbri, 2001).

The role of state administration in the NER has been very critical on the issues of community participation in forest management both before the courts and while giving effect to policies relating to CFM. In most cases relating to forests in the courts, state governments have been either silent on the issue of community participation in the management of forests or has presented a destructive image of the community in relation to forests (Sinha, 1993). Numerous official documents propagating community participation in forest management lack any kind of proper legal backing for CFM (Upadhyay and Mishra, 2004: 21).The multiple approach of state regarding forest management and ownership is an attempt to governmentalise the forest resources, by creating conflicting laws, which, in turn create loopholes in the existing laws and facilitates the state in the exploitation of forest resources as per the states wish[17].

Forest and land right in Scheduled Areas

In Assam, the recorded forest area is 26,832 sq km, which is 34.21 percent of total geographical area with reserved forest and unclassed forest constituting 66.28 percent and 33.42 percent respectively. The areas under permanently forestry has been well surveyed, demarcated and notified as reserved forests or proposed reserved forests, and generally no rights are allowed in these forests which come under the Assam Forest Regulation Act (AFR) and District Council Forest Act. The reserved forests constituted under Assam Forest Regulation before coming into effect of the District Council Forest Act are not included in the Sixth Schedule of the Constitution, but the reserved forests in the hill districts have been allowed to be managed by the District Council under the working plan prepared by the state administration (National Forest Commission, 2006).

Assam

Prior to 1863, Assam, including Bengal, was called the 'Lower Provinces' and little attention were paid to the conservancy of forests in these areas. Stebbing reported that in the early nineteenth century, the forest tracts of Assam were unexplored and the timber in Calcutta was

[17] The customary laws conflict with the state laws and even there are numerous cases of state laws conflicting with each other. For more detail see Upadhyay and Mishra, 2004

imported from the forests of North India and Burma. Dietrich Brandies was entrusted to carry out preliminary survey in the forests of the eastern Himalayas. The British account of status of forestry in the North-East is confined to forest production plans, and even conservation of forests were also mainly aimed at securing a permanent supply of timber through a state monopoly. It is reported that even forests that were under the traditional chief were leased to the government and the privilege of felling timber in the forest was sold to the government for a fixed number of years (Upadhyay and Mishra, 2004).

The Assam Forest Regulation, 1891, The Sylhet Jhum Regulation, 1891, Assam Land and Revenue Regulation, 1886 and The Chin-Hill Regulations, 1896 were some of the important Regulations with respect to land and forest, which came into force in Assam in the last quarter of the twentieth century. The regulations recognised the right of village communities to preserve and manage natural resources in their territories and the principle was later incorporated in the Sixth Schedule of the Constitution to preserve the cultural identity and rights of the tribal people under the aegis of Autonomous District Councils (Subba, 2005: 243). Out of all these legislations, the AFR is the most important legislation in the Scheduled States of the North-East, which is applicable in the entire state of Assam except in the scheduled areas of the North Cachar Hills District and the Karbi Anglong District. The AFR divided forests into four categories: these are 1) reserved forests, 2) village forests, 3) unsettled forests, and 4) forests and wasteland that are not the property of the government, where the first three categories of land were to be constituted out of only those lands, which are “at the disposal of the government” (Upadhyay and Mishra, 2004).

Apart from the classification of forestland and the settlement process, the practice of jhum cultivation is perhaps one of the most significant and contentious issues in forestry management in the NER. Under the AFR claims relating to the practice of jhum cultivation may be allowed or regulated by the District Forest Officer (DFO) empowered to deal with the claims of jhum cultivation in two distinct ways: 1) he/she may either alter the boundary of proposed reserve area so as to exclude from it the land for jhum cultivation or, 2) he/she may permit jhum cultivation in certain parts of the reserved area subjected to certain rules and conditions. It is important to note that in almost all cases, the practice of jhum cultivation deemed to be a ‘privilege’ and not ‘right’, subject to restriction, control and abolition by the state (Upadhyay and Mishra, 2004).

The AFR also provides for reserving and protecting trees in unsettled tracts (Unclassed state forest) and Section 72 (C), introduced in 1973, gave police-like powers to the DFO, and empowers him/her to evict any person from the land in a reserve forest area except a forest villager. The office of the DFO outside the purview of civil court, has been empowered to confiscate, sell, and destroy any crop raised or any building erected without its prior permission. The Assam Forest Protection Act 1986**,** in which forest includes the Reserve Forest, Protected Forest, Village Forest, Proposed Reserve Forest, Unclassed State Forest, and any area recorded as forest in government records as well as areas under various social forestry plantations came under the purview of Chief Conservator of Forests, with wide ranging powers under the Criminal Procedure Code (Cr. P.C). The Assam Forest Protection Act of 1986 also provides for the creation of a separate government force, Assam Forest Protection Force, exclusively for the protection of forest and wildlife in Assam (Upadhyay and Mishra, 2004).

The two Scheduled districts, United Mikir and the North Cachar Hills District, came into existence in 1951 (Aier & Changkija, 2005: 321). Historically, this area was classified as 'backward' tracts, 'excluded' and 'partially excluded' by the colonial government, and in post-independent India, the Constitution of India have maintained the special status conferred by the Colonial government by way of provisions contained in the Sixth Schedule**.** The Karbi Anglong District Council, using its legislative powers, passed an act to manage all forests, except the reserved forests in the district. District Councils are empowered to constitute a reserve forest out of the forestland at its disposal, and can constitute a village forest out of any land at its disposal. Such legislations, at least on theory, ensure the continuity of ownership and management title within the tribal community (Upadhyay and Mishra, 2004). But the in the Godavarman case the central and state government got sweeping powers, contrary to the Sixth Schedule of the Constitution.

Meghalaya

The recorded forest area of the state is 9,496 sq km, 42.34 percent of the total geographical area. Reserved forest constitutes 11.71 percent, protected forest 0.13 percent and Unclassed forest 88.16 percent. The control of the Unclassed forest rests with the three ADC's of Khasi, Garo, and Jaintia**.** The two categories of land ownership patterns in the Khasi hills are, first, the category of land which belongs to the community, and even if a member has a right to occupy a portion of the land, he has no transferable right, but in the second category, certain land is set

apart exclusively for certain clans, specially the original founders of villages who enjoy absolute right of occupancy of the land as well as heritable and transferable rights. The government did not recognise private ownership of high lands in the Jaintia hills, but allows anyone to cultivate them. The state has also shown an increase in forest cover of 63 sq km, generally attributed to the re-growth in shifting cultivation in hill areas (National Forest Commission, 2006:150).

The present state of Meghalaya, comprising the Garo Hill District and the United Khasi-Jaintia Hill District was originally a part of the province of Assam, because of which all the state laws of Assam, including those regulating the forests (namely The Assam Forest Regulation, 1891) is applicable along with certain specific rules, known as, Rules and Orders in Force in Certain Districts, for these districts and rules were framed relating to the use of forest produce on the lands at the disposal of the government (Upadhyay and Mishra, 2004).

In the Garo Hills, rules and regulations governing the reservation and use of forest were introduced which conflicted with the Garos traditional rights to fuel, grazing and cultivation. Between 1883 and 1895, 139 sq miles of forest area was reserved in the Garo Hills, and the British government asserted that all wasteland in the hill districts was at its disposal and no compensation other than for existing cultivation rights was accordingly paid for these blocks based on the assumption that the land on which the forest stood was the property of state and that it had absolute legal right over it. The administrative ordering and control of forest resources and population created a basis for perceptual strife and engaged the community in a prolonged protest with the British government (Kumar, 2005).

In post-independence India, The Garo Hills District (Forest) Act, 1958 was passed which provided powers to the District Councils in the management of any forest other than a ‘reserve forest’ in the Autonomous District of the Garo Hills. The Act also empowered the District Council to constitute two types of forestlands, 1) Council Reserve Forests, which is limited to forestland at the disposal of the District Council and 2) Village Forests. One of the distinguishing features of The Garo Hills District (Forest) Act of 1958 with respect to the AFR is the permission to practice shifting cultivation. The Act clearly states that the practice of shifting cultivation is ‘permitted by law’ in the council reserve forests, but still the state forest law discouraged the practice and always tried to regulate it. Another important autonomous district Act passed in the same year was The United Khasi Jaintia Hills Autonomous District Act of

1958, considered as one of the most unique Acts in the North-East because it contained the definition of the term 'forest', possibly the only statute that defines what constitutes a forest (Upadhyay and Mishra, 2004).

The AFR was extended to Meghalaya through The Meghalaya Forest Regulation (Application and Amendment) Act, 1973 and The Meghalaya Forest (Ejectment of Unauthorised Persons from Reserve Forest) Rules, 1979 further authorised the District Forest Officer (DFO) to expel any person having unauthorised occupation of land in a reserve forest. To regulate and control the timber trade, the Meghalaya Forest (Removal of Timber Regulation) Act, 1981 and within a decade the Meghalaya Forest Authority Act, 1991 was enacted. Along with all these, the 'Godavarman case' also imposed restrictions on the management, felling and trade in timber. All these laws curbed and restricted the removal of timber and tried to have a unified control over the forests through a series of laws to discourage and prevent the felling of trees in the state. Trade was allowed only through a license issued by a competent authority appointed by the state (Upadhyay and Mishra, 2004).

The framing of laws relating to forests in Meghalaya clearly points towards an increasing control of the state administration over forest resources, while, in theory, the management and control of the different categories of forest under the traditional system of forests seem to be vested in the District Council, the actual state of forest control is quite different at the ground level (Karlsson, 2005). The state has progressively augmented its power through monopoly, license and through the creation of ADCs and competent authority or a forest authority to control the management of forestry in the state (Upadhyay & Mishra, 2004, Kumar, 2005). The State has applied the tactics and strategies of forest laws quite skillfully to consolidate and legitimise its power.

Arunachal Pradesh

Although the state does not have Scheduled Districts, it has been taken as a reference point of study because of its rich forest resources, extensive practice of shifting cultivation and, more recently, the aggressive developmental policies in it.

In Arunachal Pradesh, the recorded forest area is 51,540 sq km which constitutes 6.65 percent of the country's total forest area and has nearly 16 percent of the total timber growing stock of the country, highest among individual states. Arunachal Pradesh Anchal and Village Forest Reserve (Constitution and Maintenance) Act, 1975 is the dominant forest law in the state. It contributes

nearly 50 percent of timber supply made from the NER to other parts of India. In Arunachal Pradesh, tribal people acquire their rights over as much land and forests as they inherit and, traditionally, the village has been a unit of administration. The boundaries of the lands belonging to different villages are very clearly known to the village elders, respected by neighbouring villages. For example, communities like the Nishis, who depend mostly on shifting cultivation, have community ownership of land. On the other hand, communities like Apatani and Khampti mainly depend on permanent cultivation and have individual ownership of land. Communities like the Adi, Mishmis and Hill Miris practice both shifting and permanent cultivation and have both community and individual ownership of land (Mitra, 1998:149, National Commission of Forest, 2006).

Large-scale construction of hydroelectric dams, roads and the destruction of forest resources due to other related developmental activities in the state show the hollowness of the management power of village councils and clans, who theoretically own management and ownership rights in the forests. According to Fernandes, in this bio-diversity rich region hundreds of massive long term projects are being planned in the name of development, similarly like once done at the national level (Fernandes, 2003). Baruah argues development is imposed in the state because of its geo-political location and lack of meaningful development is the root cause of insurgency in the region (Baruah, 2005). Baruah is right when he says that development is imposed in Arunachal Pradesh, but Arunachal is not the only case of imposed development, because in most of the cases development has been imposed with or against the aspirations of the people. What Baruah fails to highlight is the resistance to the development projects. Unlike the other states of the Indian union—Madhya Pradesh, Uttaranchal, Gujarat—hardly any resistance to the hydro-electric dam development projects have been highlighted.

Role of Judiciary and Community Forestry in the North-East

In post independence India, along with the various forest policies, the Supreme Court has played a paternal role in controlling the forests of India in general, and the North-East in particular. In the landmark ‘Godavarman Case’, the Supreme Court of India tried to reconcile the need for forest conservation with sustainable use of resources, in consonance with the forest laws. It becomes important to see how the Supreme Court of the country has interpreted sensitive issues relating to the forests, which had far-reaching impacts on communities whose livelihoods depend on forest resources.

Previously under different legislations, ‘forests’ were classified and defined differently and a universal definition of the term ‘forest’ was missing. Due to the absence of a universal definition of forest in any of the central or state legislations, the Supreme Court provided a definition of forest in the Godavarman case, made applicable to the entire country. The court, while making a distinction between ‘forests’ and ‘forest lands’, assigned a dictionary meaning to the term ‘forests’, and said that “the word ‘forest’ must be understood according to its dictionary *meaning”*. This definition covered all statutorily recognised forests, whether designated as reserved, protected or otherwise for the purpose of Section 2(i) of the Forest Conservation Act, and the term ‘forest land’ in Section 2, would not only include ‘forest’ as understood in the dictionary sense, but also any area recorded as ‘forest’ in government records irrespective of its ownership (Upadhyay and Mishra, 2004: 04).

In the famous Godavarman case, the Supreme Court passed several orders related to commercial activity in forestry, which had vast implications on the livelihoods of communities dependent on forest activity. The Court while directing the implementation of Section 2 of the FCA, banned all commercial, non-forest activity in any forest area without the prior approval of the central government and imposed an interim ban on timber felling which was not being carried out in accordance with the working plan of the Forest Department. The use of forest land for non-forest purposes included regulation of grazing, eviction of people from forest land and allotment of reserve forests for non-forest purposes was banned (Upadhyay and Mishra, 2004: 09).

In the wake of the Supreme Court’s definition of forest, the Assam government for the first time defined ‘forest’ under the Assam (Control of Felling and Removal of Trees from Non-Forest Lands) Rules, 2002. The definition is much wider and covers legal as well as natural grown forests. According to these rules, forests include all the legal categories of forests; i.e. reserved forests, protected forests, those recorded as forests in government records and continuous patch of 10 ha or more having not less than 200 naturally grown trees per hectare. The court later on asked all the North-Eastern states to frame rules with respect to the felling of tree from non-forest lands, with the concurrence of the Ministry of Environment and Forests (Upadhyay and Mishra, 2004: 05-18).

Shifting Cultivation in the North-East

Shifting cultivation exists in many regions, not only in India, but in many parts of the world and plays an important role in the economies of societies living in forests and in proximity to forests, but the practice has been controversial among academia and policy makers (Mey, 2005). Due to these controversies surrounding the practice, a number of other substitutes and supplementary methods like taungya and terrace farming have been experimented within the jhum areas, both in colonial and postcolonial India. Estimates of shifting cultivation range from 3 to 26 million and it is practiced in at least in sixteen states, around 95 percent in the North-Eastern states where shifting cultivation accounts for most deforestation (National Forest Commission, 2006).

Shifting cultivation refers to type of farming or agricultural system in which a short but variable cultivation phase alternates with a long and equally variable fallow period. It involves the clearing of forests, and woodland or grassland vegetation for cultivation accomplished by simple hand tools (National Forest Commission, 2006). In most hilly slopes all over the world, especially in areas inhabited by tribal people, a type of shifting cultivation, i.e. slash and burn method, popularly known as jhum, cultivation is practiced[18]. Shifting cultivation, according to Burmon, (1977) is practiced in hilly areas because hill slopes are unable to hold water and manure which get drained out with the rainwater and also practiced due to sparse population and excess of land.

The popular perception is that forest fire, over-grazing, and shifting cultivation have largely destroyed forestlands. To remedy this, the Forest Department in British India advocated the extension of forest reserves, less wasteful management of timber concessions, the re-organisation of the forestry staff and the introduction of taungya cultivation**.** Taungya was the supervised caricature of shifting cultivation, a method of raising new crops of forest trees, used by the Forest Department, to entail shifting cultivation procedures (Elvin, 1986, Malik, 2003). In the pos-independence period terrace cultivation, as an alternative to jhum, was introduced in the NER, but failed to get wide acceptance from the communities practicing jhum cultivation. One possible reason for the failure was the heavy monetary input and its maintenance cost, which also required heavy fertiliser applications. Similarly, the alternative three-tier model formulated by the Indian Council of Agricultural Research (ICAR) for jhum cultivation also failed because the

[18] Shifting cultivation is also known dhya and *panda* cultivation in central India.

model did not take into account the socio-economic set-up in which tribal societies function (Mitra, 1998). All these methods of cultivation were experimented to sedentarise the mobile *jhumias*[19].

Shifting cultivation was considered a primitive and inferior system of cultivation that needed to be done away with, and one of the most vocal proponents of anti-shifting cultivation camp was, the famous British administrator Baden-Powell. In 1874, he said, 'the fact is that the cultivation system is so wasteful that somehow or the other it must be put just like *'suttee'* or any other great evil and the practice destroy a valuable capital to produce a miserable and temporary return. The way to control the destructive practice is to reserve large areas and prohibit jhum, along with efforts to change their habits and turn to settled agricultural practices'. The forest officials tried to establish control over the natural resources, preferred settled agriculture to shifting cultivation, and held that reserve areas would not last for long if thrown open to jhum cultivation (Kumar, 2005).

Richard Temple, officer in the colonial administration, referring to *Baiga* in Central India, said that so long the *Baiga* practiced jhum cultivation, they would continue to remain 'men of the hills and never rise in the social scale'. Colonial administrators like Forsyth considered the *Baiga* the most terrible enemy of the forests he had seen anywhere in the hills and alleged that they had destroyed thousands of square miles of Sal forest in the progress of their *dhya* cultivation. Another British official, W.V. Grigson considered shifting cultivation as responsible for the destruction of fine and valuable forest, foretelling desiccation and erosion, and condemned *panda* as a lazy method of cultivation (Elwin, 1986: 126-127).

Shifting cultivation was considered 'primitive', 'irrational' and 'short-sighted' contrasted with scientific, rational, and long-term state management of forests in the region (Malik, 2003). The Forest Department determined to impose scientific and 'rational' forest management restricted and banned shifting cultivation wherever possible and justified the ban on the ground of arresting the degradation of forests. Shifting cultivation, along with grazing, remained the banes of the Forest Department, and in annual reports of the forest department, both jhuming and grazing were ranked on par with pests, insects and disease, which caused maximum 'injuries to the forest' (Ribbentrop, 1989, Brandies, 1994, Bryant, 1995 & 1996, Malik, 2003).

[19] The term 'jhumias' has been used to denote shifting or jhum cultivators.

Over a period of time the dominant official ideologies and policies relating to shifting cultivation concretised, which in turn directly or indirectly influenced the corpus of knowledge (techniques, practical skills and know-how) about shifting cultivation communities. The official policy of forest use and the practice of shifting cultivation found itself in opposite directions and the Forest Department's concern with shifting cultivation was to completely ban or control and restrict the practice in areas directly under its control, i.e. Reserved Forests (Malik, 2003). Too many people depended on shifting cultivation and because of the fear of unrest among the forest communities, the practice of shifting cultivation was selectively permitted, mostly in 'unclassed forests'.

In the NER it is difficult to estimate the actual figures of population and area under shifting agriculture as a whole. Approximate figures do not include degraded lands subsequently abandoned by shifting cultivators (Malik, 2003), but according to a rough report of the National Forest Commission (2006), shifting cultivation is practiced predominantly in the NER. In most states, entire village communities are engaged in shifting cultivation within their village boundaries, shifting the field under cultivation every year without changing their place of habitation. In some cases, tribes like the Karbi and Kuki change their habitation due to the impermanence of cultivation even within the scope of the jhum system.

In Assam, during the colonial regime, jhum land was theoretically not being held in ownership by the tribesmen. The ruling of the colonial government stated that jhum land which the owners have bough or inherited as immovable property, held by an individual or a clan, is all unclassed forest at the absolute disposal of the government on which there is no liability (no paying of compensation by government) in the event of its being taken over (Elwin, 1986: 105). In the case of the Khasis of Meghalaya, land may be owned either jointly by the clan or privately and land ownership among the Garos is according to lineage groups. In the case of Arunachal Pradesh, the clan clearing the stretch of land is considered to be the owner of the land under cultivation for that season (Mitra, 1998).

In Meghalaya, the Jhum kheti or aba-oa, in the Garo hills has historically been the principal mode of agricultural practice. While it is difficult to say about its harmful effect on forest conservation then, it is certain that shifting cultivation was done sparingly and less intensively because they were guided by subsistence needs rather than pecuniary value (Kumar, 2005, Mitra,

1998). The loss of forest area is not only due to shifting cultivation but also because of conversion of forest land into permanent agricultural land for plantation crops and commercial crops and diversion of forestland for developmental projects like mining, roads and dams. In Arunachal Pradesh, a study undertaken by the Indian Council of Agricultural Research (ICAR) in 1981 shows that around 70.77 percent of the total cropped area of the state is under shifting cultivation, which makes it the highest among all the states in the NER (Mitra, 1998).

The continuous production of a negative image about shifting cultivation practices from colonial to postcolonial India as an inferior and wasteful method of cultivation, pushing the economy to the brink of impending collapse became the justification for state interventionism, in both colonial and post-colonial India (Malik: 2003). The dominant perspective is that shifting cultivation is a wasteful and ecologically destructive system, detrimental to forests and soil, and needs to be strictly controlled or wherever possible, eradicated by inducing cultivators to adopt other some advanced forms of agriculture. With the failure of the dominant perspective, the other paradigm comes into play, according to which, shifting cultivation is a legitimate practice which ensures the very survival of the people living in hills and hence should be allowed to carry on (Malik, 2003). The same state ‘interventionism’ to regulate shifting cultivation transformed into the process of governmentalisation in the making of environmental subjects (Agrawal, 1995), so that it can control the forest resources through same populations who were earlier considered threat to the forest.

The British government constituted the Bardoloi Committee, 1935 which recommended that the tribes must have the final say on cultivation of jhum. The Committee opined that the practice of jhum should be discouraged and controlled wherever possible, and no general legislative bar can be laid down without taking into consideration the local circumstances prevailing in the region. The Commission suggested that the customary laws of the people inhabiting the region should be minimally interfered with and the hill people should have full powers of administering their own social laws (Upadhyay and Mishra, 2004). According to Pinkaew, every power relationship contains sites of opposition and resistance. Power is constituted through discourses of institutionalisation and bureaucratisation of nature conservation by state. Through an in-depth study of Karen highlanders in Thailand, she hopes to reveal the structures of domination and question the "truths" or taken-for-granted assumptions of contemporary conservation ideology in Thailand. The discourse of "truths" render hill tribes enemies of the nature, which in turn

legitimise resettlement and appropriation of the forestlands once controlled and owned by hill tribes (Pinkaew, 2002).

The social, economic and political history of the North-East is important to understand the present scenario of forest policies. The different creations of new institutions, laws and policies and discourse around shifting cultivation played important role in governmentalisation and state-making in the region. The ADCs created to safeguard and manage forest according to local customs and traditions became one of the most important instrument through which the state negotiated with the local communities. The Godavarman case directly contradicted the ADCs and asked the state to curb and control timber felling wherever possible. The issue of shifting cultivation continued as a wasteful form of cultivation in both colonial and post-independence period and steps were devised to control it. All these issues had one thing in common, i.e. justification for state interventionism both in colonial and postcolonial India.

CHAPTER FOUR
Politics of Conservation

> "the task of environmental aesthetics in a meta- critical sense is the theoretical control of the description, interpretation and evaluation of the environment and the creation of a frame of reference. It constructs a model of how the environment is received, and in what ways it operates as an aesthetic object."
>
> Yrjo Sepanmaa[20]

Forest conservation in India is caught in the contradictory policies of the legislative, the executive and the judiciary, none of which address the basic causes of forest degradation, apart from shifting the blame on to forest dwellers. According to Sarin, unless the underlying causes of deforestation are tackled, neither conservation nor social justice objectives can be achieved (Sarin, 2005: 03).

The dominant paradigm of forest conservation at the current historical moment focuses on preservation and the maintenance of 'biodiversity' dependent on a set of political, economic, and intellectual realities with few parallels in human history. Conservation of biodiversity and preservation of wildernesses are goals that make sense to urbanised elites in industrial society for recreational and aesthetic beauty, i.e. urban environmentalism. But the societies whose livelihoods depend on forests products conserve forests so that they can continue to sustain themselves, i.e. environmentalism of the poor (Smith & Wishnie, 2000: 516, Guha and Martinez-Alier, 1997). According to Singh, the institutional context and power relations within which these actors are bound is one where some are empowered to 'speak for nature' while others whose livelihood depend on these resources are voiceless (Singh, 1985). The current conception of conservation follows from the fact that forest policy, till very recently, stressed on the productive aspects of forests and scant attention was paid to conservation of forests. The system of 'working plans', introduced in the colonial period involving the planning of timber extraction in accordance with principles of scientific forest management, has continued in post-independent India, which has hampered the economies of many forest dependent states.

[20] Yrjo Sepanmaa (1986) The Beauty of Environment: A General Model for Environmental Aesthetics. Academia Scientiarium Fennica. Hilsinki

In most North-Eastern states revenue, from the forest continues to be a significant source of state income. The Godavarman case can be considered an important landmark where the Supreme Court of India directed the North-Eastern states to prepare scientific working plans before cutting forests for timber (Upadhyaya and Mishra, 2004). This, along with the need to clear forest land for agriculture and other purposes like industries, dams and mining ensured that forest cover continued to be cleared for rising demand. According to Singh, the institution of forest contractors has been done away by most of the states, who have replaced these contractors by Forest Development Corporations, but this has not significantly stopped illegal felling in many of the states, because the Forest Corporations have themselves become centre of vested interests and often they work through the same people who were earlier forest contractors (Singh, 1985).

The politics of conservation has been extended from human–nature relationships to the more abstract politics of knowledge of nature, and human understanding of human-nature relationships. The twin forces of centralised government and expanding commercial interests often undermine local resource management and have accelerated market-driven resource extraction to satisfy increasing revenue and commercial demands. Community forests managed for centuries by villages or other collectivities suffered first at the hands of colonial government and in the postcolonial period, those of the Indian government, whose intention, like the colonial government, was on skillfully extracting commercially valuable timbers from the forests and combating what they see as the dangers of deforestation due to local use.

The Supreme Court's judgment in the Godavarman case overpowered most existing policies, both customary and state, on forestry which had very negative impacts on the forest-rich North-Eastern states where both the state revenue and livelihood of people depended on sale of timber and other forest resources. The Supreme Court appointed High Level Committee (HLC) (Upadhyay and Mishra, 2004) to oversee the working of forest policies in the region directing state governments to prepare a working plan for forests, is another example of the centralising tendencies of the government. The 'backward' regions of the North-East which were loosely administered during the colonial period have become politically important for the post-independent Indian government because of its vast natural resources and possibility of connecting and opening trade route to South-East Asia. To strengthen its control over the region

the Indian state has been applying new tactics and strategies in the form of laws and recently aggressive development schemes[21].

External control, first by the colonial government, and in the post- independence period by central and state governments has destroyed local incentives for the conservation of forests, leading to over-exploitation by both outside commercial interests and local peoples. According to Smith & Wishnie, the increased demand for forest resources, particularly an increased local demand for natural resources, due to greater involvement in market economies, as well as population growth, has made it difficult to re-establish effective systems of community conservation (Smith & Wishnie, 2000: 505). The banning of timber trade has not stopped people from felling trees; instead they started making charcoal out of forests which was allowed to take out of state boundaries for commercial purposes (Nongbri, 2001).

Conservation and the Issue of Population

Overpopulation, especially in third world countries, is often given extra weight by many prominent conservationists as the primary cause of environmental destruction. In other words, environmental concerns were conflated with demographic obsessions and thus to save nature, we must reduce population (Agrawal & Sawyer, 2000, Forsyth & Walker, 2007). For example the concept of desertification provided an image of humans despoiling fragile ecosystems and blamed human activity for the expansions of deserts (Forsyth & Walker, 2007).

Thomas Malthus' famous hypothesis, in *Essay on the Principle of Population* (1798), is that population numbers tend to grow exponentially while food production grows linearly, resulting in natural 'checks' such as famine to further growth. Although the subject was periodically taken up again in the ensuing decades, it was only in the 1960s that significant research interest on population and environment degradation was rekindled. In 1968, Paul Ehrlich's *The Population Bomb* focused public attention on the issues of population growth, food production, and the environment and by 1972 the *Club of Rome* released the first computer-based population environment modelling effort, which predicted an 'overshoot' of global carrying capacity within 100 years (Sherbinin, Carr, Cassels and Jiang, 2007: 346). James Fahn's writings on Thailand's environmental catastrophe argued that almost every resource the country owns has been wasted with little thought for the future. The rise in population and inconsiderate economic development

[21] More and more hydro-electric dams, roads and mining plans and schemes have been passed. See Baruah, 2005.

has left Thailand's rich forest devastated and "their amazingly rich biodiversity became endangered before it could even be fully recorded" (Forsyth and Walker, 2007).

The colonial policies of scientific forestry and conservation form the logic behind the present form of environmental conservation which, at the same time seeks to protect forests and revile forest dwellers (Guha and Martinez-Alier, 1997). The construction of nature from 'wild' to 'fragile' provided the ideological legitimacy to the conservationist laws of both colonial and post -colonial governments in India. Nature no longer exuded danger; rather it was itself endangered. Despite their extraordinary richness, tropical rain forests are among the most fragile of all habitats, because of demographic pressures in Third World countries, and will continue to accelerate the rate of deforestation in the near future unless some immediate steps are taken to the conserve forests. According to Agarwal and Sawyer (2000: 88-90), the links between deforestation and overpopulation are so integral that any discussion on deforestation reverts to an obsession with the Third World demography. According to Pinkaew, in Thailand the state increasingly viewed the question of "overpopulation" among the highland shifting agriculturalists as the main cause of forest destruction in the hills (Pinkaew, 2002).

According to the Report of the National Forest Commission of India (2006), with the increasing human and human induced development activities, forest resources have been severely fragmented and degraded, threatening biodiversity and the extinction of many wild species of plants and animals. Conflicts in states like Assam, Meghalaya and Arunachal Pradesh have also been seen in terms of resource depletion due to the continuous migration from Bangladesh, where migrants have been accused of the appropriation and destruction of natural resources. According to Fernandes, the region witnessed massive immigration of Bengali Hindus at the Partition in 1947. It has continued later. An estimated 12 lakh Bangladeshi Muslims have entered India since then and a relatively large number of Hindus too have migrated from Bangladesh to Tripura. There are equally large number of Burmese, Tibetans and north Indians in the region (Fernandes, 2003). The recent wave of violence between Bodos and Bengali Muslims in Udalguri (Assam) has been projected as a population problem by various leading newspapers.

The 'population explosion' thesis in recent decades has increasingly come under academic criticism where environmental problems are said to be essentially social and, thus, that their origin cannot be deduced from human numbers and the population thesis, it is argued diverts

attention from real issues of resource distribution and production relations (Agarwal & Sawyer, 2000). According to Fairhead and Leach (1998) common estimates of human-induced deforestation have been highly exaggerated. In the NER, along with population growth, other serious problems of environmental destruction are the aggressive push of development activities, mainly hydro-electric dams, mining and roads, often neglected as causes of environmental destruction[22]. The issue of population has only become rhetoric and a safe instrument to penetrate deeper into the lives of populations, ignoring other serious environmental destructive programmes.

Conservation and Community Forest Management

The Sixth Schedule of the Indian Constitution was an innovative effort to give small tribes in the NER extensive powers to develop themselves while protecting their traditions, lands and rights through a system of Autonomous District Councils. These laws have worked to a degree because all these communities and regions are not homogenous, and homogeneous programmes are bound to face hurdles (Hazarika, 2004: 773). Communities are fractured entities rather than homogeneous units and processes of community conservation are susceptible to power struggles and processes of elite capture (Poffenberger, 2006, Xaxa, 1999, Karlsson, 2005, Smith and Wishnie, 2000). The phenomenon of 'community' is a romantic category that serves to simplify complexities and make people a legible and segregated 'other' and can be best understood in the light of cultural re-articulation, political tensions, and unequal power relations (Singh, 1985: 10).

There are mainly two types of community forest management practiced in India. The first type is Community Forest Management (CFM) guided and influenced by policies, acts or laws of the government. The second is CFM governed by customary beliefs and practices and is under the control of traditional authorities, which have their own values, norms, rules or customs which define social relationships (Nongkynrih, 2002: 48). The second type of forest management is practiced predominantly in many states of the NER, which escaped usurpation of common forest land from the centralising tendencies of the Indian state. Consequently, in the North-East, communal land and forest ownership is managed in accordance with the customs and traditions of community institutions, which for *sometime* provided a counterpoint to centralised forest management by the state in rest of the country. However, recent trends of aggressive

[22] Scholarship in NER projects population as a major problem (Baruah, 2005, Fernandes, 2003). My purpose is not to deny that population problem does not exist in NER, but the kind of attention it has been accorded. Other serious issues of resource distribution have been neglected in the rhetoric of population growth.

development on the one hand and forest conservation policies on the other by the central government in the region have led to the increasing control of the age old customary resource conservation practices. The classificatory and demarcatory power of the state is visible in the definition of forest lands, mainly the classification of communal shifting cultivation lands as 'unclassed forest' (Sarin, 2005: 05).

The mega-dam development activities in Arunachal Pradesh, taken up by the government, financed mainly by Public Sector Undertakings (PSU) have destroyed acres of forest land and, in the near future, the development activities may submerge many more forest lands (Baruah, 2003 and 2005). According to Baruah (2005: 36) developmentalist discourse has constructed people and places as under-developed, creating a structure of knowledge around that object which makes the case for development seem self-evident. In Arunachal Pradesh, development discourse is the product of the central government's push to nationalise the space of this peripheral region. The developmentalist path (roads, dams) on which the Arunachal government has embarked is the result of intended and unintended consequences of the Indian state's effort to assert control over this frontier space and to make it a 'normal' part of India's national space. Baruah is right when he says that 'development' is forced on Arunachalees, which carries with it the strong ideological backing of development as progress and also financial remuneration in the forms of grants and interest free loans, but he fails to bring-out the resistance to the development projects.

The governments in North-Eastern states exert minimal control in comparison to other parts of India over forests because autonomy in forest management lies with District Councils, traditional institutions, clans and individuals. In December 1996, the Supreme Court banned timber logging and commercialization of timber with the intention to control the large scale, indiscriminate felling of trees, over-riding the powers of District Councils, empowered under the Sixth Schedule to manage forest resources within their jurisdiction (Upadhayay and Mishra, 2004, Lele, 2007). On the one hand, the state has empowered District Councils to manage and conserve the forest resources according to the norms and rules of the indigenous communities, on the other Supreme Court's judgment in the Godavarman case curbed the power of District Councils and imposed restrictions on timber logging through centralising orders and judgments. The states in the NER have been practicing the binary of give and take, where on the one hand, they give concessions to the ADCs, and, on the other, they take it back in the name of protecting depleting forest resources.

Conservation and the Judiciary

The process of 'territorialisation' started in the colonial era through legislation backed by force which entailed establishing effective administrations in newly conquered areas by drawing boundaries as marks of legality and illegality to consolidate populations into definite groups under the centralised rule of the colonial government (Scott, 1998). In post-colonial India, along with legislations, the Supreme Court has joined the bandwagon of territorialisation to control the lives of the forest communities. Thus territorial control, according to McCarthy, has been directly used to regulate the relationship between forest communities and resources by demarcating boundaries to control access to natural resources within defined boundaries (McCarthy, 2005: 64-65).

Along with written law, the lack or denial of information and confusion about legal rights seriously affects the lives of communities dependent on forest resources. State forest laws facilitate the implementation of the national legal framework, where each sate applies suitable state-level laws to govern and conserve forest resources. A common feature for many central and eastern Indian states is the strong influence played by the umbrella The Indian Forest Act, 1927, followed by a number of other state-level Acts, rules and regulations. The remaining North-Eastern and Southern States operate under a rather unique legal framework. The Assam Forest Regulation Act, 1891 is the umbrella law operative in North-East rather The Indian Forest Act, 1927 (Upadhyay & Mishra, 2004, Vasan, 2005, National Forest Commission, 2006).

The Assam Forest Regulation, 1891 forms the legal foundation of all forest ownership, use, and conservation in the NER. Like The Indian Forest Act, 1927, the AFR establishes strict procedures for classified forests as either reserved forests or protected forests (Vasan, 2005). According to Brandies (1994), 'the procedure by which reserved forests are gradually freed from customary rights is regulated by legislative enactments'. In practice, legal procedures to transpose rights by grant of money or land were often bypassed by forest administration in order to quickly gain unconditional control of as much forestland as possible (Schug, 2000: 237). Thus, according to Sinha, during the 1880s, villagers in the Garo Hills lost all rights to land declared as reserved forests with little or no compensation (Sinha, 1993).

Given the symbiotic relationship of forest communities with forests, the Forest Policy of 1988 proposed involving tribal communities closely in the protection, regeneration and development of forests while ensuring the protection of their rights. However, the policy was silent on the issue of restoring ownership and control over forest resources to the communities and was bound by contradictory coercive provisions of conservation laws which now govern their lives. With the introduction of the Joint Forest Management (JFM), community rights have been marginalised because of the prevalence of community ownership of forestry in the region. The impacts have been tragic for forest communities, due to the narrow interpretations of the Forest Acts and the Supreme Court's orders in the Godavarman case (Sarin: 2005:11).

Increasing trends towards the democratic decentralisation of forest governance and the restoration of the indigenous communities' rights over their ancestral lands and forests are being developed through collaborative governance systems with indigenous communities for biodiversity and forest conservation after restoring their customary tenures and resource rights and building on their indigenous knowledge and cultural diversity. Despite the existing legal provisions permitting the decentralisation of forest management rights to forest communities, the Supreme Court's orders in Godavarman case made it mandatory for all the forest lands, especially in the North-East to be managed in accordance with 'working plans' prepared by Forest Departments. The Supreme Court's order is the antithesis of community participation mandated by the Forest Policy, 1988 and the constitutional mandate for the decentralisation of governance (Sarin, 2005: 16). The judgement has wider implications where communities have the right to ownership and management of forest resources (Nongbri, 2001).

The Supreme Court's interim order in the Godavarman case made the Forest Department the biggest beneficiary by giving them more powers to regulate and control forestland despite its widespread record of forest mismanagement in the past and Godavarman filing a Public Interest Litigation (PIL) against the forest bureaucracy because of mismanagement (Sarin, 2005: 09). The Supreme Court's interim order in 1996 brought all recorded forest lands in the government's records under the preview of Forest Department (Vasan, 2005, Nongbri, 2001).

Together with the objective of 33 percent forest cover, existing forest policies and the interim orders imposed by Supreme Court intensified the injustice to forest communities whose rights were frequently violated in the name of conservation and the protection of forests. The objective

of 33 percent forest cover and scientific working plans authorised Forest Departments in the region to lay claims on community forests as well as cultivated lands to increase the present forest area, further alienating forest communities instead of increasing their incentives for conservation (Sarin, 2005: 10), ignoring the fact that many forest communities in the North-East have preserved their rich traditions of sustainable management and conservation of forestlands (Nongkynrih, 2004, Singh, 1996).

According to Sarin, both colonial and post-colonial governments in India have been the biggest violators of the rights of forest communities through the indiscriminate notification of community forests as state forests or protected areas, often without settling their rights. Tribal economies in many regions of India have been based on managing cultivated and uncultivated lands as a common, integrated resource base through diverse communal resource management traditions and systems (Sarin, 2005: 11) but the poor recognition of communal tenures and the increasing governmentalisation of forest resources in areas once assigned to Autonomous District Councils has decimated the economies and livelihoods of forest communities.

Indigenous and Scientific Knowledge

Superiority in knowledge and unequal relations of power— both economic and political— provided western biologists and environmental experts (scientific experts) the capacity to guide and influence forest conservation practices throughout the globe (Agarwal, 1997). The propagation of scientific knowledge is also linked with the ability to take part in scientific discussion, where political definitions of expertise result in the stabilisation of certain scientific statements. Instead of being authoritative in its own right, scientific knowledge has been used to enhance 'pre-existing means of establishing authority' (Forsyth and Walker, 2007).

The scientific capacity to predict and generalise becomes the basis on which the West lays claim and ultimately controls the tropics. As Grove tells us, military surgeons and biologists in colonial India began to play an important role in the expansion of the British Empire through the taxonomic classification of forestlands on the ground of 'desiccation theories' (Grove, 1995). The taxonomic classification and arrangements of nature through a rational, unified, classificatory order was fundamental in the process of the definition and ordering of species (Agarwal and Sawyer, 2000: 82, Foucault, 1970: 76). All these classifications have sought to classify forest resources for its utilitarian, commercial value (Scott, 1998, Agarwal and Sawyer, 2000).

The colonial state, according to Nicholas Dirks, is often projected as a stage for state experimentation; where documentation, historiography, certification and representation were all state modalities that transformed knowledge into power (Dirks, 1997). The classification and drawing of lines between indigenous and scientific knowledge has come a long way since the colonial period and the debate has intensified in the post-colonial period. The mainstay of traditional economy among most forest peoples inevitably entails the destruction of the forest. The main threat, according to Henley comes not from local populations, but from increasing commercialisation and migrant settlers (Henley, 2008: 283). The British government in the NER attempted to ban shifting cultivation so that they could manage forests on the basis of scientific 'working plans' and also introduced the 'Inner Line Permit' in certain states to restrict the inflow of population in the region, which has been continued in the post-independence period through various policies and laws.

Like 'scientific knowledge', much of what is presented as 'indigenous knowledge' is a response to particular social problems and so it is difficult to assume that what is labelled 'indigenous knowledge' is necessarily representative of all people in the community (Forsyth and Walker, 2007). According to Agrawal, "Given the failure of numerous philosophers of science, including Leibniz, Popper, Carnap, Grunbaum and Lakatos, to find satisfactory demarcation criteria between science and non-science, it is , perhaps, unnecessary to undertake a tedious investigation of the limitations of such a chain….Most philosophers of science have long abandoned the hope of a satisfactory methodology for distinguishing science from non-science….The interrogation undermines the possibility that any piece of knowledge can be forever marked or fixed as indigenous of western. Indeed, I suggest that the attempt to create distinction in terms of indigenous and western is potentially ridiculous" (Agrawal, 1995).

Communities who practice indigenous knowledge do not have much power to influence what is done with their knowledge and in most of the cases they are confined to positions of localised resistance to the effects of power produced by those who possess scientific knowledge. The 'scientisation' of indigenous knowledge is driven by particular relations between development, science, and power, where believers in the efficiency of indigenous knowledge practices appeal to scientific knowledge experts to authorise indigenous knowledge. In short, scientific criteria are required to validate indigenous knowledge. There is no real difference between indigenous and

scientific knowledge, and once indigenous knowledge is achieved and data-base is created and approved by scientific experts, it is no different from scientific knowledge (Agrawal, 1995 and 2002).

To ignore indigenous knowledge, which is in the interest of the forest dwelling communities, is almost to ensure failure in conservation. This in turn, means that indigenous knowledge is associated with the values of the traditions of local communities (Forsyth and Walker, 2008, Aier and Changkija, 2005: 376). Indigenous knowledge is also about a political geography where some communities or regions are seen to be indigenous, while other regions are not (Forsyth & Walker, 2007). Many non- governmental organizations and donor agencies[23] lead initiatives on indigenous knowledge which operate on the assumption that indigenous knowledge is an underutilised resource and thus a database of indigenous knowledge practices should be created. Disagreeing with Agrawal, on the elimination of difference between indigenous and scientific knowledge I propose that both indigenous and scientific knowledge are knowledge system of two different cultures and local and personal experiences of knowledge or to what Scott (1998) calls *metis* cannot be scientified and catalogued.

Shifting Cultivation

The debate on indigenous and scientific knowledge can be best analysed in the context of shifting cultivation in the NER, a contentious issue since the time of British government and one of the most important forms of indigenous cultivation denounced by 'scientific' experts. The issue of shifting cultivation has been a contentious issue between the authorities and the forest communities in the North-East since colonial times. There are varying opinions on the positive ecological effects of shifting cultivation and it is also believed that the alternate burning and cultivation of plots of land allows the vegetation and soils to regenerate lost nutrients. Shifting cultivation practices are much more than an agricultural technique for the communities practicing it. The importance of shifting cultivation can be seen in terms of structuring social institutions, myths, and legends of tribal life (Scott, 1998, Mitra, 1998).

In contrast to its importance for communities practicing shifting cultivation, the practice of shifting cultivation was strictly discouraged by the colonial administration as being primitive, unproductive and un-remunerative, especially in comparison to settled agriculture, because of the

[23] Community Forestry International and McArthur Foundation are the major donor agencies involved in community forestry in the the NER.

'threat' it posed to lucrative timber conservation. The colonial attempt to curb shifting cultivation provoked sharp reactions from the hill tribes whose livelihoods depended on shifting cultivation, which forced the colonial administration to allow shifting cultivation in certain areas (Saikia, 2008, Elwin, 1986). According to Saikia, for the most part, the forests of Assam came to be regarded as useless from the commercial point of view, and thus the need for scientific forestry was proposed to make forest 'sustainable' by using silvicultural strategies which aimed at the conservation of commercially valuable forests resources and the taungya system of forests regeneration was introduced along with shifting cultivation. Taungya and other alternative methods of cultivation failed because of the absence of the community's participation starting from the initial conceptualisation to the actual operation of alternative schemes (Saikia, 2008).

Conservation and Governance

Objects become conservation objects because they convey certain messages and also because a number of people agree that they have desirable social and scientific meanings, which must be socially and scientifically recognised where human subjectivity is socially elaborated (Agrawal, 2005). Thus the inter-subjectivism in conservation is a consequence of agreements among the subjects for whom objects have meanings (Vinas, 2005: 153). According to Vinas, in contemporary conservation theory, the primary interest is on subjects and no longer on the objects and thus objectivism in conservation is replaced by certain forms of subjectivism (Vinas, 2005: 147). Objects[24] and subjects are closely linked, where the same object is used to produce environmental subjects who became partners in the process of governmentalisation.

In post-independence India, certain forest communities in the NER came under the governance of an elected body known as Autonomous District Council (ADC), which became responsible for the management and conservation of forest resources, and in the course of time produced subjects concerned about the environment. According to Agrawal, environmental subjects pursue goals that they imagine as their own and in which they often construct state officials as inefficient, unsupportive, corrupt and through regulations and calculations, they participate in

[24]According to Cohn, objectification has different forms and meanings, but always involve the coding in ways that render objects increasingly available for colonisation. Things are fabricated and are transformed into objects that have value and meaning and it was British who, in the nineteenth century, defined in an authoritative and effective fashion how the value and meaning of the objects produced or found in India were determined. It was the patrons who created a system of classification which determined what was valuable, that would be preserved as the monuments (Cohn, 1997:77). Also see Sivaramakrishnan, 1999.

institutional arrangements to govern the environment which make them partners in the process of their own governance (Agrawal, 2005, Lemos and Agrawal, 2006).

The process of subject formation is crucially connected to participation and practice where the practices of 'regulative rules' in which forest communities have come to participate have to do with more careful government of the environment and of their own actions and selves (Agrawal, 2005 : 20-21). The ADC created potential for forest communities and the state to come together in a binary form of government in which, on the one hand, a vision of shared interests was manufactured and, on the other, forest communities were bound by the regulative rules of the District Councils. Over the course of time, the forest communities protecting forests and controlling illegal forest practices used the same languages of 'regulation' and 'protection' of the state, and instead of protesting against the restrictive rules and the governmentalisation of forest resources, like other north Indian communities, forest communities in the North-East gradually became partners in the process of the governmentalisation of their own resources.

Forest Departments with limited resources and few trained staff found it hard to enforce 'restrictive rules' in areas they tried to turn officially into forests with law enforcement increasingly became difficult due to the unwillingness of forest dwellers to co-operate with Forest Department. It became unmanageable for the government to bank only on those strategies of forest making—exclusion of people and demarcation of landscapes—that it had initiated and implemented in other parts of India (Agrawal, 2005: 8-9). The restrictive rules were often enforced and followed by confessional incentives and gun power to control warring forest communities (Elwin, 1986) [25]. In course of time the restrictive and discriminatory rules started to show cracks which resulted in ethnic clashes and insurgency in the region (Hazarika, 2004). A number of studies (Nag, 2000, Hazarika, 2004, Subba and Ghosh, 2005, Baruah, 2003 and 2005) have outlined acts of rebellion in the Naga, Garo and Sadiya hills since the late nineteenth century till the present day in response to the government's efforts to restrict and regulate access to forest and other resources.

[25]In colonial discourse, Nagas and other tribes were frequently portrayed as savage who are to be civilised and to tame warring tribes, tactics of both force and concession were employed.

Conservation and Environmental Narratives

According to Fiona D. Mackenzie, from the early 1920s, the doctrine of trusteeship, which informed colonial thinking, drew increasingly on the authoritative claims of the 'scientific method', both to generate 'crisis narratives' in the reserved forests and to construct discourses of 'betterment' and 'environmentalism', which legitimated a deepening of administrative control (Fiona D. Mackenzie, 2000). According to Leach and Mearns, there is a narrative of degradation and peril to the environment that has been formulated by colonial science and has become an almost unassailable "truth" (Leach and Mearns, 1996). Environmental narratives are a form of 'governmentality' or the realisation of political ends by locating decisions in expert institutions that remove discussion from the wider public domain and make it an expert zone. The state Forest Department performs the role of expert institutions to what Derrida says, by 'drawing lines', generating statistical summaries of forest functions and implementing so-called scientific forestry mainly with the intention to extract timber, rather than generating multiple views of forest use based on wider public consultation (Sivaramakrishnan, 1999, Forsyth and Walker, 2007 , Kumar, 2005, Vasan, 2005). The process of simplification was achieved by using superior technology and the legal power of state to arrange territories and resources in ways that simplified administrations and greatly enhanced state capacity for surveillance and control of populations (Scott, 1998).

Most commonly heard explanations for environmental problems in North-East India, such as the perils of deforestation or shifting cultivation as environmentally destructive are mostly environmental narratives which pay little regard to the social norms of the local forest communities and serve an important political function by enabling the state to increase its control over forest resources and communities dependent on forests, and also providing ground rules within which debates on the conservation and forestry take place with diverse social actors negotiating the state. In many instances, environmental narratives have presented faulty representations of environmental cause and effect relationships and have stabilised and legitimised certain policies (Fairhead and Leach, 1998, Frosyth and Walker, 2007). One of the key strategies of modern government, according to Scott, is to introduce simplifying regimes of social classification and spatial organisation that render neighbourhoods and communities legible in the eyes of the state. Environmental narratives that condense and selectively summarise complex processes play an important role in this simplifying process (Scott, 1998, Forsyth and Walker, 2007).

States, institutions and dominant forces have frequently deployed negative stereotypes about particular groups in order to justify their rule (Said, 1979). The state is not monolithic, neither is it completely diffuse. Rather, the state is a more or less loosely linked set of institutions of varying unity and strength, which have continuity in time and space and have internal hierarchies and politics of knowledge (Sivaramakrishnan, 1995, Mathews, 2005). These institutions generate forms of knowledge and ignorance which are not uniformly spread out as 'official knowledge' or accepted by all the officials. In certain cases, state power is premised directly upon official ignorance order to allow state officials to make claims to knowledge, and to affirm their status as representatives of a state which knows, manages, and makes use of information. These knowledge claims, according to Mathews (2005), become 'symbolic capital' which helps officials assert their authority in routine, unofficial encounters with their clients, and also between higher and lower level officials.

The official discourse of environmental degradation, according to Agrawal, has rarely been challenged in public and it has been used to justify the power of both colonial and postcolonial states, but this does not prevent local people from subverting or ignoring forestry regulations in their private affairs (Agrawal, 2005). In the case of forestry in North-East India, the calculations and tactics which are supposed to produce official discourses of power/knowledge have been shaped both by the complex political nature of the region, and by the existence of long-standing traditions of community management of forests which is quite distinct from other regions of mainland India.

The varied strategies of control—through laws, news institutions of ADCs, narratives, development discourses—brought range of ideas that assigned the colonial state a dominating role in the management of forest resources. Powerful notions of conservation and management of forest resources necessitated the need to deploy various tactics and strategies that helped the state to become more legitimate.

Conclusion

The process of forest destruction in nineteenth century India due to military and commercial exploitation led to the establishment of the imperial Forest Department in 1864. To check deforestation and to sustain the continuous supply of timber for the empire, the Forest Acts of 1865 and 1878 and later on the Assam Forest Regulation Act, 1891, the Forest Policy of 1894 and the Forest Act, 1927 was enacted which, by regulating and reserving forests, attempted to provided complete monopoly of the state over forest resources. The colonial government was also forced to grant concessions to some tribes and regions because of the fear of revolt. We see here that both repression through laws and concessions through the granting of selective rights were the instruments in the process of state-making.

Post-independent forest policies in India underlined the continuity of colonial forest policies by upholding the fundamental concepts of colonial forest legislations (Vasan, 2005, Sivaramakrishnan, 1995) and forest policies, like their colonial counterparts, reinforced the state's claim over forest resources by alienating and labelling indigenous forest dwellers and their practices as a threat to the forest. The perceived threat was not only to forest but also to the legitimacy of state itself. The post-independent state continued to follow regulatory and confessional practices to gain legitimacy in the areas which were once loosely administered.

The idea of the 'reasonable' use of forest resources, based on historical- political-scientific definitions became important in the political arena and influenced the politics of forest conservation in independent India, where forests continued as a site for the application of the colonial knowledge. State control and forest conservation reinforced one another under the banner of scientific forestry and thus many of these tribal societies are being forced in the process of transition from shifting cultivation to settled agriculture, from clan control of resources to commodification of resources, even leading to the prolitisation of certain forest communities in North-East (Baruah, 2005).

State policies of certain programmatic aspects of scientific forestry through classification, reservation, protection, and regeneration institutionalised forest management through an engagement with issues of governance, resource conservation and enhanced productivity (Sivaramakrishnan, 1995) brought with it the control over forest communities along with the forest resources to practice what Foucault calls the 'art of government'. The 'art of government'

was to bring the areas that were unadministered or lightly administered during British rule through the binary of development-conservation, progress and protection and by providing[26] assistance to states making them fully dependent both politically and economically on the central government (Baruah, 2005).

For over a century, various observers have adopted a narrative of population growth, over-cultivation, deforestation, desertification, and declining soil fertility in many regions promoted by colonial scientists, government agencies, and some NGOs, who have supported land-use and population restrictions as a way to avoid a downward spiral of environmental collapse (Fiarhead & Leach, 1998). I have attempted to highlight the multiple levels of governmentalisation by analysing the institutions of forest laws, judicial control, the scientific versus indigenous knowledge debate and the creation of environmental subjects in the process of state-making.

The politics of forest conservation in the NER is closely linked to the politics of the region, where the central government has been pushing to legitimise its hold over the region. Forest laws and policies have played an important part in the process of legitimisation by forcing forest communities to become partners in the process of their own governance. The narratives of deforestation and environmental degradation due to shifting cultivation have been propagated to apply scientific ideas in forestry, which, in turn, colonise the very imagination of the forest communities in the production of environmental subjects. Forest policy in the North-East has been an important instrument in the hands of the state to control and regulate the lives of forest-dependent communities. In other words, by regulating the forest, the state has been able to regulate the lives of subjects dependent on forests for their livelihood.

[26] Grants and Interest free loans are provided in most of the North-Eastern states.

Bibliography

Agarwal, Anil & Narain, S (1989) *Towards Green Villages*: *A Strategy for Environmentally Sound and Participatory Rural Development.* Centre for Science and Environment, New Delhi.

Agrawal, A (1995) *Dismantling the Divide Between Indigenous and Scientific Knowledge*. Development and Change. (26), pp 13-439.

Agrawal, A (1999) *Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation.* World Development. 27 (4), pp 629-649

Agrawal, A (2005) *Environmentality: Community, Intimate Government, and the Making of Environmental Subjects in Kumaon, India*. *Current Anthropology*. 46(2), pp 01-38

Agrawal, A (1997) *The Politics of Development and Conservation: Legacies of Colonialism.* Peace and Change. 22(4), pp 463-483

Agrawal, A (2002) *Indigenous Knowledge and the Politics of Classification*. ISSJ 172/2002@ UNESCO

Agrawal, A (2005). *Environmentality: Technologies of Government and the Making of Subjects*. Duke Univiversity Press. Durham.

Agrawal, A & Sawyer, S (2000) *Environmental Orientalisms*. Cultural Critique. (45), pp 71-108

Aier, A & Changkija, S (2005) Indigenous Knowledge & Management of Natural Resource *in* Subba, T. B & Ghosh, G.C *ed* (2003) *The Anthropology of North-East India:* A Textbook. Orient Longman. New Delhi

Bandopadhyay, A (2004) Three Issues from a CPR Management: Village Forestry in Post Colonial South Asia *in* Chaudhuri, BB & Bandopadhyay, A *(ed) Tribes, Forest and Social Formation in Indian History*. Manohar Publication. New Delhi.

Baruah, A K (2003) *Tribal Traditions and Crises of Governance in North East India, With Special Reference to Meghalaya*. DESTIN. London

Baruah, S (2003) *Citizens and Denizens: Ethnicity, Homelands, and the Crisis of Displacement in North East India*. Journal of Refugee Studies. 16(1)

Baruah, S (2003) *Nationalizing Space: Cosmetic Federalism and the Politics of Development in Northeast India.* Development and Change. 34(5), pp 915–939

Baruah, S (2005) Durable Disorder: Understanding the Politics of Northeast India. Oxford University Press. New Delhi.

Baviskar, A (1997) *Tribal Politics and Discourses of Environmentalism*. Contributions to Indian Sociology. 31, pp. 195-223.

Beinart, W & Hughes, L (2007) *Environment and Empire*. Oxford University Press. London

Brandis, D (1994) *Forestry in India: Origins and Early Developments.* Dehradun

Bryant, R.L (1995) *The Political Ecology of Forestry in Burma.* Hurst. London

Bryant, R.L (1996) *Romancing Colonial Forestry: The Discourse of 'Forestry as Progress' in British Burma*. The Geographical Journal. 162(2)

Gordon, C (1991) Governmntal Rationality: An Introduction *in* Burchell, G, Gordon, C & Miller *(ed) The Foucault Effect: Studies in Governmentality*. The University of Chicago press. Chicago

Burmon, A.K (1977) *Tribal Agriculture in the North-Eastern Hill Region*. Social Scientist. 6(3), pp 61-68

Cederlof, G & Sivaramakrishnan, K (*ed)* (2005) *Ecological Nationalisms: Nature, Livelihood, and Identities in South Asia.* Permanent Black. New Delhi.

Chaube, Munsi & Guha (1975) *Regional Development and the Question of North-East in India.* Social Scientist. 4(1).

Chakrabarti, S B (2005) Agrarian Relation in Tribal Milieu *in* Subba, T. B & Ghosh, G.C *ed* (2003) *The Anthropology of North-East India:* A Textbook. Orient Longman. New Delhi

Charnley, S & Poe, M R (2007) *Community Forestry in Theory and Practice: Where Are We Now?.* Annual Review Anthropology. (36), pp 301-36

Cohn, B (1997) *Colonialism and its Forms of Kowledge: The British in India*. Oxford University Press. New Delhi.

Dirks, Nicholas B (1997) Foreward in Cohn, B. *Colonialism and its Forms of Kowledge: The British in India.* Oxford University Press. New Delhi.

Dove, M R (2006) *Indigenous People and Environmental Politics*. Annual Review of Anthropology. (35), pp191–208

Elwin, V (1986) *The Baiga*. Gyan Publishing House. Delhi

Escobar, A & Paulson, S (2005) The Emergence of Collective Ethnic Identities and Alternative Political Ecologies in the Colombian Pacific Rainforest in Paulson, S & Gezon, L.L (*ed) Political Ecology Across Spaces, Scales and Social Groups.* Rutgers University Press.

Escobar, A (1997) Cultural Politics and Biological Diversity: State, Capital, and Social Movements in the Pacific Coast of Colombia, *in* Lowe, L & Lyod, D (*ed), The Politics of Culture in the Shadow of Capital*. Duke University Press. Durham and London.

Fairhead, J & Leach, M (1998) *Reframing deforestation: Global analysis and Local Realities: Studies in West Africa.* Routledge. London

Fernandes, W (2003) Development Displaced and the Right to Life: Implications for the Northeast *in* Bhattacharjee, T (ed) *Problems of Internally Displaced Persons in Assam with Special Reference to Barak Valley.* Silchar: Department of Political Sciences, Assam University.

Fiona D. Mackenzie, A (2000) *Contested Ground: Colonial Narratives and the Kenyan Environment, 1920-1945*. Journal of Southern African Studies. 26(4) pp. 697-718

Flint, E.P (1999) Deforestation and Land use in Northern India with a Focus on Sal (Shorea Robusta) Forests 1880-1980 *in* Grove, RH, Damodaran V & Sangwan, S *(ed)* (1999) *Nature and the Orient: the Environment History of South and Southeast Asia.* Oxford University Press. Delhi.

Forsyth T, & Walker W (2007) *Forest Guardians, Forest Destroyers: The Environmental Knowledge In Northern Thailand.* University of Washington Press. Seattle and London.

Foucault, M (1970) *The Order of Things: An Archeology of the Human Sciences*. Tavistock Publication. London

Foucault, M (1975) Discipline and Punish: The Birth of the Prison. Penguin. London

Foucault, M (1991) Governmntality *in* Burchell, G, Colin G, and Miller, P *(ed) The Foucault Effect: Studies in Governmentality*. The University of Chicago Press. Chicago

Gadgil, M (2007) *Empowering Gramsabhas to Manage Biodiversity: The Science Agenda.* Economic and Political Weekly. 42(22) pp. 2067-2071

Gilmartin, D (1994) *Scientific Empire and Imperial Science: Colonialism and Irrigation Technology in the Indus Basin*. The Journal of Asian Studies. 53(4)

Goswami, A (1984) *Tribal Development with Special Reference to North-East India*. Social Scientist. 12(8) pp. 55-60.

Grove, R (1995) *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860*. Cambridge University Press. London

Grove, R (1999) The East India Company, the Raj and the El Nino: The Critical role Played by Colonial Scientists in Establishing the Mechanisms of Global Climate Teleconnections 1770-1930 *in* Grove, R, H. Damodaran. V and Sangwan, S *ed* (1999) *Nature and the Orient: the Environment History of South and Southeast Asia.* Oxford University Press. Delhi.

Guha, R (1996) Fighting for the Forests: State Forestry and Social Change in Tribal India *in* Mendelsohn, O & Baxi, U *(ed) The Rights of Subordinated Peoples.* Oxford University Press. New Delhi

Guha, R and Gadgil, M (1997) *The Fissured Land: An Ecological History of India.* Oxford University Press. Delhi.

Guha, R & Martinez-Alier, J (1997) *Varites of Environmentalism: Essays North and South*. Earthscan. London

Haeuber, R (1993) *Indian Forest Policy in Two Eras: Continuity and Change.* Environmental History Review. 17(1)

Hames, R (2007) *The Ecologically Noble Savage Debate* The Annual Review of Anthropology. 36:177

Hardin (1968) The Tragedy of the Commons. Science, 162, pp.1243-1248.

Hazarika, S (2004) *Land, Conflict, Identity in India's North-East: Negotiating the Future*. ScienceDirect. Futures. (36), pp 771-780

Hazra, A K (2002) *History of Conflict over Forests in India: A Market Based Resolution.* Liberty Institute. Delhi.

Henley, D (2008) *Natural Resource Management: Historical Lessons from Indonesia*. Human Ecology. (36), pp 273-290

Holt, F L (2005) *The Catch-22 of Conservation: Indigenous Peoples, Biologists, and Cultural Change*. Human Ecology. 33(2)

Jha, LK (1994) *India's Forest Policies: An Analysis and Appraisal.* Asish Publishing House. Delhi

Johnson, K A. & Nelson, K C (2004) *Common Property and Conservation: The Potential for Effective Communal Forest Management within a National Park in Mexico*. Human Ecology. 32(6)

Joshi, G (1983) *Forest and Forest Policy in India.* Social Scientist.11(1)

Kar, RK (2003) Tribal Social Organisation *in* Subba, T. B & Ghosh, G.C (*ed)* (2003) *The Anthropology of North-East India:* A Textbook. Orient Longman. New Delhi

Kumar, D (1996*) The Culture of Science and Colonial Culture, India 1820-1920.* The British Journal for History of Science. 29(2)

Kumar, S (2005) *State Simplification: Garo Protest in Late 19th and Early 20th Century Assam.* Economic and Political Weekly. 40(27) pp. 2941-2947

Leach, M and Mearns, R (1996) The Lie of the Land: Challenging Received Wisdom on the African Environment. Heinermann and Oxford.Portsmouth.

Lele, S (2007) *A 'Defining' Moment for Forests.* Economic and Political Weekly. 52, pp. 2379-2383

Lemos, M C & Agrawal, A (2006) *Green Revolution in the Making? Environmental Governance in the 21st Century*. Annual Review Environment and Resources. 31, pp. 297–325

Malik, B (2003) *The 'Problem' of Shifting Cultivation in the Garo Hills of North-East India, 1860–1970*. *Conservation and Society*, 1(2).

Mann, M (1999) Ecological Change in North India: Deforestation and Agrarian Distress in the Ganga-Yamuna Doab 1800-1850 *in* Grove, RH, Damodaran, V and Sangwan, S *(ed)*(1999) *Nature and the Orient: the Environment History of South and Southeast Asia.* Oxford University Press. Delhi.

Mathews, A S (2005) *Power/Knowledge, Power/Ignorance: Forest Fires and the State in Mexico.* Human Ecology. 33(6).

McCarthy, J F (2005) *Between Adat and State: Institutional Arrangements on Sumatra's Forest Frontier*. Human Ecology. 33(1).

Mey, W (2005) Shifting Cultivation, Images, and Development in the Chittagong Hill Tracts of Bangladesh *in* Cederlof, G & Sivaramakrishnan, K *ed* (2005) *Ecological Nationalisms: Nature, Livelihood, and Identities in South Asia.* Permanent Black. New Delhi.

Mitra, A (1998) *Environment and Sustainable Development in the Hilly Regions of North-East India: A study in Arunachal Pradesh*. International Journal of Social Economics. Vol. 25(2/3/4), pp. 196-206.

Muhlhausler, P & Peace, A (2006) *Environmental Discourses*. Annual Review of Anthropology. (35), pp. 457-79.

Mukherjee, S (2004) *Fragile Environment*. Manak Publications. New Delhi

Murray Li, T (2002) *Engaging Simplifications: Community Based Resource Management, Market Processes and State Agendas in Upland Southeast Asia*. World Development. 30(2), pp. 65-283.

Nag, S (1999) *Bamboo, Rats and Famines: Famine Relief and Perceptions of British Paternalism in the Mizo Hills (India).* Environment and History. (5), pp. 245-252

Nazarea, V D (2006) *Local Knowledge and Memory in Biodiversity Conservation*. The Annual Review of Anthropology. 35, pp. 317–35

Nongbri, N (2003) Elephant Hunting in Late19th Century North-East India: Mechanisms of Control, Contestation and Local Reactions. Economic and Political Weekly. 36(21), pp.1893-1900.

Nongbri, T (2001) *Timber Ban in India: Effects on Livelihood and Gender*. Economic and Political Weekly. 36(21) pp. 1893-1900

Nongkynrih, A. K (2002) *Who is in? Who is out? Equity and Customary Community Forest Management in Meghalaya, India*. www.recoftc.org

Nygren, A (2000) *Development Discourses and Peasant-Forest Relations: Natural Reaource Utilization as Social Process.* Development and Change. (31), pp 12-34

Pathak, A (2002) *Laws, Strategies and Ideologies: Legislating Forests in Colonial India.* Oxford University Press. Delhi

Pinkaew, L (2002) *Redefining Nature: Karen Ecological Knowledge and the Challenge to the Modern Conservation Paradigm*. Earthworm Books.

Poffenberger, M (2006) *Communities and Forest Management in North-East India*. Communityforestryinternational. Santa Clara.

Prasad, A (2004) *Environmentalism and the Left: Contemporary Debates and Future Agendas in Tribal Areas.* Left world. New Delhi

Rajan, R (1999) Imperial Environmentalism or Environmental Imperialism? European Forestry, Colonial Foresters and Agendas of Forest Management in British India 1800-1900 *in* Grove, R.H, Damodaran. V and Sangwan, S *(ed)* (1999) *Nature and the Orient: the Environment History of South and Southeast Asia.* Oxford University Press. Delhi

Rangarajan, M (1999) Production, Desiccation and Forest Management in Central Provinces 1850-1930 *in* Grove, RH, Damodaran, V & Sangwan, S *(ed)* (1999) *Nature and the Orient: the Environment History of South and Southeast Asia.* Oxford University Press. Delhi.

Report of the National Forest Commission (2006), Government of India, Ministry of Environment and Forests

Resolution National Forest Policy (1988), Government of India, Ministry of Environment and Forests, Department of Environment, Forest and Wildlife.

Ribbentrop, B (1989) *Forestry in British India. Indus Publishing Company*. New Delhi.

Robb, P (1997) *The Colonial State and Constructions of Indian Identity: An Example on the Northeast Frontier in the 1880s.* Modern Asian Studies, 31(2), pp. 245-283

Roy Burmon, B K (1994) *Indigenous Tribal Peoples: Gathering Mist and New Horizons.* Mittal Publications. New Delhi.

Sarin, M (2005) Laws, *Lore and Log Jams: Critical Issues in Indian Forest Conservation*. International Institute for Environment and Development. London

Said, E (1979) *Orientalism.* Vintage Books. New York.

Saikia, A (2004) *Indigenous Control and Sustainability of Common Resources in the Hills of North East India.* Presented at 'The Commons in an Age of Global Transition: Challenges, Risks

and Opportunities' the Tenth Conference of the International Association for the Study of Common Property, Oaxaca, Mexico, August 9-13, 2004.

Saikia, A (2005) *Jungles, Reserves, Wildlife: A History of Forests in Assam.* Wildlife Areas Development and Welfare Trust, Assam.

Saikia, A (2008) *State, Peasants and Land Reclamation: The Predicament of Forest Conservation in Assam, 1850s–1980s.* The Indian Economic and Social History Review. 45(1), pp77-114

Schug, D M (2000) *The Bureaucratisation of Forest Management in India*. Environment and History. (6), pp. 229-42.

Scott, J.C (1998) *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed.* Yale University Press. New Heaven

Sherbinin, A D, Carr, D Cassels, S & Jiang, L (2007) *Population and Environment*. Annual Review Environment and Resources. 32, pp. 345–73.

Singh, S (1985) *Some Aspects of the Ecological Crisis in India*. Social Scientist. 13(7/8), pp. 82-89

Singh, K.S (2004) Rethinking forest, Forest Dwellers and Ecological History *in* Chaudhuri BB & Bandopadhyay, A *(ed) Tribes, Forest and Social Formation in Indian History*. Manohar Publication. New Delhi.

Sinha, A.C (1993) *Beyond the Trees, Tigers, and Tribes: Historical Sociology of Eastern Himalayan Forests.* Har-Anand Publications. New Delhi.

Simberloff, D (1999) *The Role of Science in the Preservation of Forest Biodiversity*. Forest Ecology and Management. (115), pp. 101-111

Sivaramakrishnan, K (1995) Colonialism and Forestry in India: Imagining the Past in Present Politics. Comparative Studies in Society and History. 32 (1)

Sivaramakrishnan, K (1999) Modern Forests: State Making and Environmental Change in Colonial Eastern India.

Sivaramakrishnan, K (2000) *State Sciences and Development Histories: Encoding Local Forestry Knowledge in Bengal.* Development and Change. (31), pp. 61-89

Smith, E A & Wishnie, M (2000) *Conservation and Subsistence in Small-Scale Societies*. The Annual Review of Anthropology. (29), pp. 493–524

Subba, T. B & Ghosh, G.C *ed* (2003) *The Anthropology of North-East India:* A Textbook. Orient Longman. New Delhi

Sundar, N (2007) *Subalterns and Sovereigns: An Anthropological History of Bastar 1854-2006.* Oxford University Press. New Delhi

Sundar, N (2000) *Unpacking the 'Joint' in Joint Forest Management.* Development and change. (31), pp 255-279

Skaria, A (1999) Timber conservancy, Desiccationism and Scientific Forestry: The Dangs 1840s-1920s *in* Grove, R H, Damodaran, V and Sangwan, S *(ed)* (1999) *Nature and the Orient: the Environment History of South and Southeast Asia.* Oxford University Press. Delhi.

The State of India's Environment: The First Citizen's Report. Centre for Science and Environment (CSE: 1996). Delhi.

Tucker, R (1999) Non-Timber Forest Product Policy in the Western Himalayas under the British Rule *in* Grove, R, H. Damodaran. V and Sangwan, S *(ed)* (1999) *Nature and the Orient: the Environment History of South and Southeast Asia. Oxford University Press. Delhi.*

Upadhyay, S & Jain, S (2004) *Community Forestry and Policy in North- East India: A Historical Legal Analysis*. Community Forestry International. Santa Barbara.

Upadhyay, S & Mehra, S (2005) *Transit Rules for Forest Products in Northeast India: The Conflict Within.* Communityforestryinternational. Santa Barbara

Vasan, S (2005) *In the Name of Law: Legality, Illegality and the Practice in Jharkhand Forests.* Economic and Political Weekly. 40(41), pp 4447-4450

West, P, Igoe, J & Brockington, D (2006) *Parks and Peoples: The Social Impact of Protected Areas.* The Annual Review of Anthropology. (35), pp. 251–77

Yumnam, J.Y (2008) *Rich Biodiversity of North East India Needs Conservation*. Current Science. 95 (3), pp 297