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facilitating reserved forests as de facto
open access**

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**Re looking at Forest Policies of Assam:
Facilitating Reserved Forests as *de facto* Open Access?**

1. Introduction

Institutional arrangements not only determine the efficacy of public services, management and conservation of common pool resources like forest is also determined by the institutional arrangements governing them. The primary characteristics of the common pool resources are non-excludability and limited supply (Ostrom 1990). Forest resources share common attributes with many other resource systems which make it difficult to govern and manage the same in a sustainable, efficient and equitable manner (Ostrom 1999). Destruction of forest is most likely to occur in cases where effective governance and control has not been established.

Forests have economic value and also provide a sustained source of income to a section of the population; hence, they turn out to be 'contested resources over which different sections of the society seek to assert control'ⁱ. Consequently, right of ownership and usage along with control becomes critical. These together give the authority to enforce the said right when the need arises and its enforcement is believed to secure control over future benefits. This authority may be vested with a community, a village, a state authority or the national government. The type of property rights regime set up by the state has a strong bearing on the economic and social dimensions of those who relate to its management and steer its governance (Hazra 2002). In most of the modern political economies, forests have been identified as resources of national importance and authorities have consequently assumed property rights and control. Notwithstanding the rights of ownership and management, forests are considered as common-pool resourcesⁱⁱ because for many uses of a forest, one person's harvesting subtracts products that are not available to others i.e. subtractability and in many cases it is difficult to physically exclude the potential users from using the resources, i.e. non-excludability (Ostrom et al. 1994, 2000; Conroy 2002). The users of these resources are short-run players who have complete information; they have profit-maximizing motive and over-appropriation of the resource by these users lead to degradation. However, empirical studies have contradicted the applicability of the conventional theory to forest management and these studies have shown that in many locations, the users have organized themselves to protect and in some

cases, enhanced local forestsⁱⁱⁱ. Often, problems in forest management have emerged when local self-instituted organizations were overlooked or not recognized by policy makers, and thereby the autonomy of forest users to continue their forest use practices were threatened^{iv}. This results in conflict between the community management groups and the state, leading to tragedy of the resource system. Although natural resources exist at a local level, however, the state authorities have often used power or cumbersome laws to take control and manage these natural resources at the local level as in the case of state forests. Many developing countries nationalized land and water resources during the 1950s and 1960s but governmental agencies were not very successful in their efforts to design effective rules to regulate important common pool resources across a broad spatial domain and often lacked funds and personnel to monitor these resources effectively. Consequently, common-pool resources were converted to a *de jure* government property regime but reverted to a *de facto* open access regime.

1.1 Focus of the Paper

Assam has lost forest cover in recent years. The actual forest cover to the total geographical area of the state has decreased from 26.50 percent in 1969-70 to 24.58 percent in 2003 (Government of India 2003). There is large scale unabated encroachment in the reserved forests by the new settlers, people displaced by floods and ethnic clashes in the State, immigrants and excessive dependence of the people in the rural areas on the forests leading to deforestation (Assam Forest Policy 2004). The forest survey data reveal that loss of forest cover in the State has been increasing over the years. The decrease in total forest cover during the period 2001-03 which was 41 sq. km, increased to 90 sq. km during the period 2003-05.

The encroachment in reserved forests is a major concern in the management and conservation of forests. Approximately 12.77 percent of the total forest area in Assam was under encroachment with 70,149 encroacher households as on 2003 (Government of Assam 2004). The loss of forest cover in the state is attributed to illicit felling of trees in insurgency affected areas of Sonitpur, Darrang and Karbi Anglong while shifting

cultivation has been mainly responsible for loss of forest cover in the districts of North Cachar Hills Karbi Anglong, Karimganj and Hailakandi (Government of India 2005).

The present paper endeavours to understand the issue of deforestation and degradation in reserved forests in the light of forest policies that have evolved in the State and how far these policies have embedded scope for *reserved forests* to become *de-facto* open access.

The paper has been divided in to four sections. The introductory section raises the issue of deforestation, degradation and property rights for forest conservation and management. It also discusses the focus of the present paper. The second section discusses the forest policy framework that has evolved over the years. The third section discusses forests as a source of sustenance and the rights of use. The final section analyses the question of property rights and the forest policies in the State and how the conflict of interests has led to reserved forests becoming *de-facto* open access under common pool.

2. Forest Policies-A review

2.1 Forests of Assam during the Pre-British Period

Assam had been known for her rich and extensive forest resources in ancient period although commercial use of forest was not extensive. Timbers were used mainly for building houses, boats and furniture and fixtures for day-to-day common use. Neither agriculture nor forest dependent activities took place in extensive scale to put pressure upon forests in ancient Assam.

The ownership over forests was with the community inhabiting in fringe areas and these forests were classified under pastureland usually located in the outskirts of the proper village and sometimes along the boundary of the villages (Handique 2004). Although very low, commercial interest in forests started growing since the beginning of Ahom rule in Assam. New forest areas were cleared for the purpose of cultivation in the plains and shifting cultivation in the hills^v. Historical records show that forest product especially timbers were used for revenue earning purposes in the Ahom dynasty. Although Ahom rulers did not follow any well-conceived rules for the management of forests, they valued forests and considered them as the royal property and realized royalties on them. The

government also appointed officers to look after forest products especially timbers (Ganguly 2006). They did not interfere with the traditional *jhum cultivation* practiced by the tribal population and the communal forest lands were left outside the revenue system. The *jhum cycle* was relatively longer with 15-20 years because of the high forest–man ratio and this '*length of the cycle*' allowed natural regeneration of forests that were cleared for *jhum*.

2.2 Inception of Forest Policies in India since the British Colonial Administration

Forest conservation and protection within a legal framework was introduced in India during the British colonial administration. Till 1935, forest was a subject with the central government. In government of India Act of 1935, the dual system of government was brought in to operation and separate list of subjects were formulated for the provinces and the federal provincial legislative lists under the Act.^{vi} In the constitution of India, the subject of forests was included in the State List in the VI schedule.^{vii} However, till independence forests were controlled by the individual states under the same legal framework defined by the first forest legislation, the Indian Forest Act of 1878. After independence, forests continued to be placed on the State list of the Constitution. Forest Departments of individual states continued to regulate forests as per the regulations set by the Indian Forest Act of 1927. However some states had their own forest Acts e.g. Assam: Assam Forest Regulation 1891, Tamilnadu: Tamilnadu Forest Act 1882.

In the post independence period forest was the subject in the State List in the VIIth schedule of the constitution of India till 1976. It was transferred from the "State List" to the "Concurrent List" by the 42nd amendment in 1976. This resulted in the reduction of power of the states to control and regulate forests within the territorial jurisdiction of the State. The Government of India used its power drastically and further curtailed state's rights over forest by the promulgation of the forest conservation ordinance issued on October 25, 1980 (No. 17 of 1980) which was later converted into an Act.

2.3 Forest Policies in Assam during the British Administration

The history of forest policy and conservation in Assam is directly related to the growth and development of forest administration under the British colonial government. With the extension of British administration to Assam under 'Treaty of Yandabo' in 1826, the commercial use of forests found new expression. British interest was mainly in teak which was needed by the Royal Navy as English Oak was entirely depleted before 1800 (Nadkarni et. al. 1989). When the British annexed Assam, six-eighths or seven-eighths of the province was under forest cover (Handique 2004). These were considered as waste lands as they earned no revenue for the administration and hence expansion of agricultural land was encouraged by clearing waste lands (forest areas). In addition to the requirements of British Navy, the timber from teak was also used for extending railways to the interior forest areas (Handique 2004). The expansion of tea estates in Assam began a new era in the management of wastelands and they contributed to large scale degradation of forestland. With development of tea industry, opening up of railway lines, setting up of plywood factories, safety matches factory etc. forest products came to be directly used as industrial inputs such as railways sleepers, tea chests and plywood products, match sticks and boxes.

The growing commercial interests of the British required conservation of forests at equal pace. This necessitated complete control over the forest resources- thus began the classification of forests into different zones viz. reserved forests, open forests or protected forests. After culling out Assam as a separate province from Bengal in 1874, the Forest Department of Assam was set up in 1874 with the responsibility of managing the forests. The British forest administration in Assam during the period from 1874-1947 promoted the commercialization of the forest resources with conscious State control on forest resources of the State. The Assam Forest Regulation Act (AFRA) enacted in the year 1891^{viii} defined itself "a regulation to amend the law relating to forests, forests produce and duty leviable on timber in Assam". The Act empowered the State administration to constitute any "land at the disposal of the government" a reserved forest^{ix}. Further British administration recognized grazing as one of the important factors for deforestation and degradation of reserved forest in Assam and hence it was believed that prohibition of

such activities will help in checking further deterioration to the forest cover of Assam. It also empowered the State administration to restrict or abolish the practice of *jhum* cultivation and it conferred State Government with the absolute privilege to control such practices irrespective of the local customary rules and forest protection practices. The AFRA recognized three basic rights viz. a right of way, a right to water course or to use water, a right of pasture or to forest produces to the claimants over and above the right in or over any land but conferred the State Government with predominant power in the determination of right of way or water course instead of the deemed necessity of the people for whom it was meant for. In respect of right of pasture, the Act provided for such provision of land by the State Government in lieu of payment of some money by the claimant or grant of a land. The Act empowered the State Government to create Village Forests on any land at the disposal of the government for the benefit of any village community or group of village communities. However the village communities were not given any right in its management and continuance of such villages was at the discretion of the government.^x

2.4 Post Independence Era

The forest policies and forest management practices in the post independence era are guided by the policies framed at the National level. As the World Bank (2007) observes, “The center generally sets the broad national policy and legal framework and supporting status”. The government forest policies in independent India can be divided in to two periods: a) 1947-1980 – period of production/industrial forestry, and b) 1980 onwards- period of social forestry with active participation of the people.

Three key forest policy announcements have been made in independent India, Forest Policy of 1952, and National Commission on Agriculture of 1976 (NCA) and National Forest Policy (NFP) 1988. The 1952 policy classified the forests of India whether State or privately owned into four categories: Protection Forests, National Forests, Village Forests and Tree Lands. The policy also declared that village communities should not be permitted to use forests at the cost of “national interest”, which was identified with defense, communications and vital industries. The National Commission on Agriculture

1976, supported industrial use of forest with a focus on clear felling of valuable mixed forests and planting these areas with suitable fast growing species yielding higher returns per hectare.^{xi} Commission also identified the need to provide small timber, fuel-wood and fodder for the rural population. At the same time, the commission accused the rural poor inhabiting in and around the forests as the perpetrator of the destruction forest resources of the country. According to the report “free supply of forest produce to rural population and their rights and privileges have brought about destruction to forests, so it is necessary to reverse the process. The rural people have not contributed much towards the maintenance and regeneration of the forests. Having overexploited the resources they cannot in all fairness expect somebody else will take the trouble of providing them with the produce free of charge.”^{xii} Both the policies reserved the government rights to use timber products for ‘national interest’ while identifying the rural poor collecting fodder, shrubs, twigs and hay as perpetrators of forest destruction. The forest policies framed were in effect suited to the priorities and thrust areas of the Five year plans taken up after independence which focused on building up infrastructure and industrial base.

The growing environmental concern over fast depleting forest resources across the globe and growing community resentment over the loss of traditional rights especially of the forest dependent tribal populations made the Indian government realize the importance of forest conservation and sustainable utilization, restoration and enhancement of the natural environment. The National Forest Policy since the 1980’s envisaged that the rights and concessions from forests were to be primarily for bona-fide use of communities living within and around the forest areas, especially tribal and involvement of such communities in protection and development forests from which they derive their benefits were of crucial importance. The policies also stipulated for protection of rights and concessions relating to forest produce of these communities and involvement of local communities in forest conservation and protection. In 1990, the Government of India adopted the Joint Forest Management (JFM) under the National Afforestation Programme by enlisting the support of the local communities in forest management and the government of Assam notified the Assam Joint (people’s participation) Forestry Management Rules, in 1998. The growing realization that mere legislations do not ensure property rights in respect of

common pool resources the need for state-society partnerships in management of common resources has been the main thrust in JFM Rules.

3. Forests: Resource Support and Vulnerability

Forests have been a source of revenue earnings since the British first started the commercial exploitation of forests in the State. In the initial days Sal trees constituted to be the major forest yield in Assam. The timber trade grew substantially over the years with simultaneous increase in revenue earnings. While forests provided the grazing lands for livestock of the local communities, revenue collection was also made from the users of the grazing lands in the reserved forest areas. Thus grazing in forestland earned revenue for the Forest Department as much as the collection of fire woods and reeds.

Apart from revenue earnings, forests provided and still provide source of sustenance to poor people especially those living in the hills and in the vicinity of forests. Although forests as a source of state revenue contribute only 0.30 percent of the total State revenue earnings at present, it remains a fact that forests provide direct economic support to about 15 lakh people in the rural areas of Assam. Of the total 5.2 lakh tones annual requirement of firewood, the villagers remove more than half of it from the forests. Apart from these, about 1.8 lakh cubic meters of timber are used annually for the construction of houses (Assam Development Report 2002). The high dependence on firewood for cooking is also reflected in the Census 2001 data which shows that 75.9 percent of the households in the Assam use fire-wood for cooking. In respect of housing also, dependence on forest-based materials is fairly high. The Census 2001 data revealed that 48.6 percent of the households in Assam use wood, thatch, grass and bamboo for roofing while 71.7 percent of the State's total populations use the same materials for construction of walls in houses. The dependency on forest resources is even higher for rural areas, where 83.4 percent of the households use firewood as fuel for cooking and 55 percent and 76.9 percent of the rural households use forest-based materials for roofing and construction of walls respectively in their houses. Although the share of firewood in the total out turns of timber and firewood in the State is approximately 4.26 percent, it provides a 'safety net' in terms of sustenance of basic necessities of housing and living conditions for the poor

and the rural areas of the State and is thus significant from the welfare and equity point of view (Tamuli and Choudhury 2008).

A recent study by the authors^{xiii} to capture people's dependence on forests, in the vicinity of the reserved forests of West Forest Division of Sonitpur district revealed that 88 percent of the households living closer to the forests use firewood as their primary source of fuel for cooking. Further, families living in kutcha houses collected house construction materials like bamboo, poles, thatch, reed etc. from the nearby forest. On an average a household extracted around 40 culms of bamboo annually for house construction and fencing the homestead area. More than fifty percent of the households living close to the reserved forest areas extracted firewood from the reserved forests for both household consumption and market sale to supplement their living. The Study found that 81 percent sample households engaged in fodder collection for their livestock from nearby reserved forests. A similar proportion of households were also engaged in collection of medicinal herbs for household medication as average cost of institutional medical treatment in remote areas near the forest was higher than the average expenditure in the State. Forests therefore provide a strong safety net to people living in the vicinity of the forest areas. While firewood extraction for household consumption and extraction of other forest resources for livelihood sustenance by the poor households do not pose serious threat to forest degradation, the commercial exploitation of logging and felling for firewood supply to the market by the non-poor people has serious implications on forest degradation. In fact, in Sonitpur district, in the post-1980 period around 55 percent of the total reserved forest area of the district was encroached and the West Forest Division, which comprises 12 reserved forests, lost about 57 percent of its total reserved forest area due to encroachment during the period 1980 to 2005.^{xiv}

Apart from commercial felling of trees, reserved forest areas have been cleared for human settlement as well. As per the record of the Forest Department, till 2005 there were 933 illegal households in the Balipara reserved forests in Sonitpur district. That the reserved forests of Assam throughout the 60's and 70's and even today are most suitable areas for rehabilitation of human as well as cattle population has been recognized in the Assam Forest Policy 2004. It has clearly stated that since forest is an open storehouse of

resources, therefore forests have been subject to pressure such as encroachment, illegal felling of trees and smuggling of timber, people induced forest fire, grazing and shifting cultivation, organized group encroachment in the reserved forests etc. The Study by the authors and the statements in Assam Forest Policy indicate that the State agencies have not been effective in protecting the forests because by definition reserved forests exclude the right of access and usage to any individual or group of individuals unless permitted. The exclusion of use right under the present state property regime *vis-à-vis* high dependence on forests has led to degradation and encroachment culminating into *de-facto* open access.

Forests in India have been increasingly subjected to deforestation and degradation. More often than not, the Forest Department is identified as the biggest bane for deforestation and forest degradation (Joshi 1983; Hazra 2002). However, the point missed out by these scholars is that it is the policy framework itself which has more bearing on the problems of degradation rather than the Forest Department which is merely an implementing agency of the forest policies. In fact, the social imperatives of changing class relation have influenced state forest policies which have gradually led to alienation of man from the nature (Guha 1983).

4. Property Rights and Forest Policies: The Unresolved Question

The desirability of central state control of natural resources has its origin in the writings of Thomas Hobbes's *Leviathan* (1651) (Berkes 1994). On the contrary Rousseau (1762) believed that local communities had the capacity to effectively govern themselves and absolute central authority was unnecessary. Smith in his *Wealth of Nations* (1776) on the other hand emphasized on private property rights rather than rights of communities. The state was a facilitator to ensure free market operation and ensure enforcement of economic or commercial obligations as in the law of contracts.

Scholars view environmental problems like degradation of forests as property rights problems when rights are not properly defined. Most conflicts in forests arise because of the difficulties in clarifying the property regimes (Bromley 1991). It has been argued that "different bundles of property rights, whether they are *de facto* or *de jure*, affect the

incentives individuals face, the types of actions they take, and the outcomes they can achieve” (Schlager and Ostrom 1992). The question therefore arises as to what form of property rights should be adopted - private, state or common property rights? In a common property, the members of a group have a legal right to exclude non-members of that group from using a resource (Bromley 1991). In fact, common property regimes controlling forests, evolved over long periods of time in various parts of the developing countries, but these were rarely given formal status in the legal framework of these countries (Ostrom 1990). The property rights in a common property regime can be very clearly specified. The rights are by definition exclusive to the co-owners (members of the user group), they are secure if they receive appropriate legal support from governments and, in some settings they are fully alienable. For example, some Swiss alpine common property regimes, some Japanese agricultural and forest common property regimes and all Japanese fishing cooperatives permit trading in shares (the individually parceled rights to flow or income), while all have mechanisms by which the entire common property user group may actually sell its assets (the shared rights to stock or capital assets of the user group or corporation) (Netting 1981; McKean 1992). There is a stark difference between forest user groups such as those in Switzerland and Japan, which have both legal standing as property-owning entities and long-documented histories of community forest management, and indigenous peoples from Zaire to India, who have practiced community forest management unchallenged for decades or even centuries but who have no legal protection. As soon as forest products become commercially attractive, persons outside the traditional user community become interested in acquiring legal rights to the forest. The institutional arrangements evolved by the local communities lost their standing in the face of legal legislations. As pointed by Bruce (1996), “In many parts of the world the national state has rejected or simply refused to recognize indigenous common property regimes, and by undermining them, has returned large areas to the relative chaos of open access. It has then often responded to this chaos by insisting that the state must assume control of the resource.” Breakdowns in common property systems may reflect deficiencies in policy or policy implementation, rather than their appropriateness for managing a resource (Hazra 2002). Common property seldom has the same degree of

support in law, or elicits the same response from the authorities when threatened, as private property (Bromley and Cernea 1989; Bruce 1996).

The British and the European practice was in the main to make all property either crown or state property or private property. The practice extended to countries and places that became colonies of Britain and other European nations. With the passage of time, the extent of communal rights over property was gradually replaced either through enclosing to private property or by assigning to the crown. The practice was extended by the British Colonial administration to the forestland in India, and communal property was transferred to the crown and eventually to the Government of India. The local communities were thereby dispossessed of their traditional forest resources and uses thereof. In many cases, this has accelerated environmental deterioration and has been the source of deep social conflict (Tisdell and Roy 1996). Gadgil and Iyer (1989) conclude that British rule led to disruption of communal organizations and converted communally managed resources into open-access resources. These typified the colonial rule and more importantly majority of the governments of newly independent countries often continued the policies that reinforced the power of the Central government of the newly independent nation state. Even in the case of the People's Republic of China, similar issues have arisen, e.g., in relation to the governance of the natural resources in Jingpo areas of China (Zhuge 1996). British colonialism in India was a major force creating open-access resources in place of communally managed ones (Gadgil and Iyer 1989). In many cases, the British system dispossessed local communities of their communal property which was then effectively converted into state property, not open-access property, either legally or in practice (Tisdell and Roy 1996).

A careful analysis of the British forest policy reveals two discernable traits- the first pertains to the government methods through which lands were acquired, the nature of control exercised on it and the negotiations on the proprietary rights with the claimants or the property rights holders. The second trait reveals the control of timber and other forest produce in transit, the duties and levies on them and the collection of drift and stranded timber.

To cite an illustration, the Assam Forest Regulation Act (AFRA) 1891 provided complete state control in all aspects related with the forest management in Assam. More importantly, since AFRA was designed keeping the commercial value of the forest in its forefront, legislations were also made to regulate transit of any forest produce and all such power was vested upon the State Government. Such a management was through a greater monopolization of use care for local requirements. The locals failed to understand for whom and for what purpose the forests were conserved and reserved. Controls on local use were tightened and customary privileges enjoyed by the local communities were restricted or curtailed. In many cases, the reserved forest areas extended right up to the door steps in many settlements. In fact the compulsions of commercial interests fostered a basic contradiction between capitalism and the rational and sustainable use of natural resources in India which, was further complicated by the competing claims to forest produce exercised by the mercantile/industrial bourgeoisie and the forest dependent people for whom the produce of the forests often constituted the difference between starvation and subsistence (Guha 1983). The reservation of forestlands from communal ownership to state ownership led to conflict of interests. The need for conservation was also impelled by the loss of forests caused by the demands from sawmills and clearing of forests for expansion of tea gardens which had higher commercial demands and market returns.

An important fall out of the British forest policy in the State was that it introduced an element of exclusion to the communally owned land of the province (by reserving them) if the transfer of ownership rights of these lands to the State were found to profitable to the colonial interests. This led to establishment of property rights to the government on behalf of the contractors and merchants who could exploit them (Handique 2004). In several forest blocks of Kamrup, immigrant labourers were settled and in many reserved forests of Kamrup, villagers living outside the reserved forests were allowed free forest produce for their own requirements in exchange for ten days labour. The penetration of the non-indigenous population in the exploitation of forests and felling of timber created resentment and anger among the locals who had been denied the traditional rights to forests enjoyed by them prior to the advent of British rule in the State. The British forest policy clearly alienated the traditional rights of usage enjoyed by the local people of

Assam over the erstwhile communal forests and encouraged commercial exploitation through collusive nexus between contractors and the non-indigenous labourers.

Once a forest was declared reserved, the Forest Department exercised its absolute right – the changed administrative control therefore determined the rights of the existing villagers within newly created reserves. The Deputy Commissioners (DCs) were empowered to decide on the conferment of rights of usage to the villagers and often these officials reported that peasants claimed no rights over such reserved lands and in most cases the DCs deprived the villagers of their customary social rights over the erstwhile-reserved land.^{xv} The rights of ownership between the State administration and the local communities slow paced the process of forest conservation. The shortage of manpower to ensure vigil in the state forest areas and the higher elasticity of agricultural revenue induced policy changes within the British administration. The Forest Legislation of 1891 provided for a systematic deforestation. Although low lying forestlands were initially deforested but over time reserved forests were deforested to settle the immigrant peasants and settle their land rights. The conflicts over forestlands between the local communities and the immigrant peasants therefore have its genesis in the forest policies pursued by the colonial government. The peasantry who depended on minor forest products like thatch and bamboo for roofing, firewood for cooking fuel decried the forest acts as they debarred the communities from their livelihood sustenance. The increasing incidence of forest crimes alienated the locals who were dependent on forests and peasants started to encroach forestlands (Saikia 2005).

The practice of shifting cultivation or *jhum* pursued by large number of local indigenous peasants both in the plains and the hills of Assam were affected, as the area under reserved forests grew manifold since 1874. The Sylhet Jhum Regulation of 1891 confiscated all the existing rights with respect to *jhum* in the protected and reserved forest areas. This led to serious conflict of interest between the peasantry and the Forest Department. Consequently, common pool areas for local indigenous peasants declined. The forest rules permitted eviction of local indigenous villagers from their settled habitations within the reserved forests without any rehabilitation. Gradually the village ponds and fishery *beels* that belonged to community were leased out to individual

contracting parties. The British policies for revenue generation thus eliminated the system of communal property by transferring the rights of ownership of such properties either to the state (e.g. forest) or to individuals (e.g. fisheries, village ponds etc.). The capitalistic mode of property rights systematically removed the communal property rights and the commons.

The post independence era saw the continuation of the conflicts among the various agencies - the peasants, the locals and the Forest Department over rights of usage and access. A careful analysis of the two policy announcements in the post independence period viz. Forest Policy of 1952, and National Commission on Agriculture of 1976 (NCA) reveal that most of the clauses as envisaged in the policies framed during British rule continued. The policies clearly encouraged clearing of forestlands for 'development projects' thereby reinforcing the contractual nexus between the forest administration and the contractors/merchants that had evolved under the British patronage. The cutting down of forests for the construction of roads; building up of irrigation and hydroelectricity projects, ammunition factories, and other projects was justified in the name of national interests whereas cultivation of lands shown as forestland but without any actual tree cover was treated as encroachment (Kulkarni, 1983). Prior to 1988, the forest management objectives centered round commercial forestry and revenue generation. It was in the Forest Policy 1988 that the rights and needs of the forest dependent communities were prioritized over other aspects. Thereafter the JFM guidelines were issued in 1990. However, the Forest Conservation Act 1988 placed all the forestland under the jurisdiction of the Forest Department.

A careful study of the Assam Joint Forestry Management Rules 1990 reveals that while recognizing the importance of people's participation and also the need to confer usufructuary rights to them, the participation as well as the customary rights of the participants over forests would be regulated through the intervention of the state. State control over the Forest Protection and Regeneration Committee in the Joint Forest Management (JFM) scheme is evident in the sense that the constitution of the Committee including its executive committee (which includes the *Village Headman* or any member of the local *Village Panchayat* and the elected representatives of the beneficiaries, not

exceeding nine) has to be approved by the concerned Divisional Forest Officer (DFO) on the recommendation of the Range Officer. Both the content and process by which most state JFM resolutions have been framed inevitably reflect the unequal relationship between powerful state bureaucracies and the forest dependent communities. In fact, the Forest Department reserves the right to unilaterally cancel the JFM agreement if the latter is perceived as violating any given condition (Sarin 1996). Consequently, the people in the fringe or within the vicinity of the reserved forests in Assam come in to direct conflict with the forest personnel over their rights and ownership that stands on the protection and conservation of forests (Deka 2000).

5. Conclusion

Common property regimes, once widespread among various communities across different regions dwindled over time. There are two reasons for this- *either*, the communities opted for other arrangements, particularly in the face of technological and economic change; *or* common property regimes had been legislated out of existence. The extinction through legislation had been due to the fact that in many cases, these norms were un-codified and were left out when the newly independent colonial states attempted to formalize and codify property rights to the resources in question (e.g. in Indonesia, Brazil and most countries of sub-Saharan Africa). In regions and states where the common property regimes had legal recognition, land reforms sometimes transferred all such rights to individuals (e.g. enclosure in the United Kingdom) or to the government itself, or to a combination of the two (e.g. India^{xvi} and Japan).

Property rights and governance are not mutually exclusive. Depending on their nature of property rights over resources, individuals or groups exercise their stakes in governing the use and allocation of such resources. The question of rights and its enforcement therefore is of crucial importance. Ease of enforcement may require state or community support for these rights (Tidsell and Roy 1996). In the absence of support the exercise of rights may often lead to use of force and coercion rather than the rule of law. The property rights also include the rights of exclusion. However, exclusion is not always economic (North 1981). The property of 'exclusion' embedded in the various forest

policies since the British colonial administration reflects legality of exclusion of the local peasants and the local communities from the reserved forest areas which once belonged to the community. The loss of access to local communities and greater commercial interest under licensed extraction induced opportunistic use by business and mercantile class. The conflict of interests between the state and the locals over rights of usage in the forests 'reserved' by the administration and 'deserving' the same to suit the mercantile commercial interest by settling non-native people in the new 'de-reserved' areas by the British administration thus sanctified the primacy of political commercial interests before community interests. The degradation and encroachments in the reserved forests in Sonitpur district by non locals under political patronage resembles the re-doing of the British policy of de-reserving reserved forest areas in the State but as *de-facto* de-reserved forests with open access.

Historically, policies and measures in respect of forests have focused forest as a 'land for revenue' ignoring the local communities and societies whose life sustenance have evolved with a distributive welfare based on equity. The root cause of the conflicts thus can be traced back to usurpation of community property rights and repressive forest laws that bias against the forest dependent communities. Political patronages to encroachment of reserved forests for commercial interests have its roots in the property rights policies-the state ownership rights against communal property or leased rights *vis-a- vis* common property rights. The state property rights in respect of forests under the British administration facilitated in furthering mercantile interests in so far as the coffers of the State also earned revenues from such access and usage. The resources that had been under *a de facto* common property regime enforced by local users were converted to a *de jure* government-property regime, but have been reverted to a *de facto* open-access regime leading to disastrous consequences (Hazra 2002).

Notes:

ⁱ This concept has been articulated by Arnab Kumar Hazra in his paper *History of Conflicts Over Forests: A Market-based Resolution*, Published as Working Paper Series in Julian L. Simon Centre for Policy Research in April, 2002.

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- ii Common Pool Resources (CPRs) share two key characteristics, namely: Non-excludability, i.e. it is difficult to physically exclude the potential users from using the resources; and Rivalry or their consumption is subtract-able i.e. increased consumption by one agent implies less is available for others. CPRs include fisheries, wildlife, lack, ground water, river, mountains or mountain range and forests (Conroy 2002; Ostrom 2000). The Conventional theory of common pool resources assumes that there is a highly predictable finite supply of a particular resource at each time period.
- iii For a detailed reading refer to- Fortmann, L. and Bruce, J.W. (eds.) (1988) *Whose trees? Proprietary Dimensions of Forestry*, Westview Press, and Fairhead, J. and Leach, M. (1996) *Misreading the African Landscape. Society and Ecology in a Forest-savanna Mosaic*, Cambridge University Press, Cambridge, UK
- iv For further reading refer to -Arnold, J.E.M. and Campbell, J.G. (1986) "Collective management of Hill Forests in Nepal: the Community Forestry Development Project". In: National Research Council, Proceedings of the conference on Common Property Resource Management, 425-54. National Academy Press, Washington, DC; and Arnold, J.E.M. and Stewart, W.C. (199) "Common Property Resources Management in India", Oxford Forestry Institute, Tropical Forestry Papers 24. Oxford University, Oxford, UK.
- v Handique, op. cit
- vi Indian Forest Act 1935, item 12
- vii Indian Forest Act 1935, item-19
- viii The Act is still in practice with various amendments until the last in 1995.
- ix Land at the disposal of the government means land which no person has acquired- (a) a permanent, heritable and transferable right of use and occupancy under any law for the time being in fore (b) any right created by grant or lease made or continued by or on behalf of the government being land vested in the government for the purpose of the central government.
- x The legislation creating a village forest in Assam is different from the legislation made in the Indian Forest Act 1927. (Indian Forest Act of 1878, for the first time made provisions for the creation of village forest although it was not implemented). Village forest, under the Indian Forest Act 1927, is the forest that has been legally transferred to the village community by the state government. Once a forest is so declared the rights of the villagers regarding grazing, woodcutting, collecting forest produce etc. become the rights over the property legally assigned to the village community. But the state government under AFRA holds power to regulate such village forests after constitution, nullifying the rights of the communities in their management. However, the provision of village forest under AFRA is made in a broader sense where government can declare any land at her disposal as village forest unlike the national provision, which may create it simply transferring rights to a village community over a reserved forest.
- xi Government of India (1976): *Report of the National Commission on Agriculture, 1976*, Part IX, Forestry, New Delhi, in Rosencranz .et al. "*Environmental Law and Policy in India*, 1991, p.221
- xii Government of India (1976): *Report of the National Commission on Agriculture*, Part IX, Forestry Ministry of Agriculture and Irrigation, New Delhi, P-25
- xiii A Study on forest dependence and deforestation in reserved forests has been done by the authors. For details refer to Tamuli, J. and S. Choudhury (2008), "Forest Dependence and Deforestation in Reserved Forests: Some Evidences from the Reserved Forests of Assam", Forthcoming Issue of *Journal of Arts*, Gauhati Universtiy

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- ^{xiv} This data was obtained from Arranayak, an organisation working in bio-geo diversity and forest and environment protection by the authors during their course of Study.
- ^{xv} F.J. Needhan who was asked to look into the rights of Miri peasants who had been living there for two generations or more in Dibru reserve forest, commented that peasants had been practicing shifting cultivation 'at their own sweet will but this does not entitle them to a prescriptive right over any land in the reserve'. (As quoted in 'Jungles, Reserves, Wildlife A History of Forests in Assam' by Arupjyoti Saikia, Publisher: WLADF, Guwahati, 2005).
- ^{xvi} In India, the Forest Acts adopt the Land Acquisition Act of 1894 for the settlement of rights but does not take the dominion status of the land dependent on the settlement of such rights.

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