

“Entitlements in Community Forestry”

Case Study in Jharkhand

*Dissertation submitted to Jawaharlal Nehru University in
partial fulfillment of the requirements for the award of
the degree of*

MASTER OF PHILOSOPHY

PAWAS SUREN



**CENTRE FOR THE STUDY OF LAW AND GOVERNANCE
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067
INDIA
2008**



July 29, 2008

Declaration

I declare that the dissertation entitled “**Entitlements in Community Forestry**”, **Case Study in Jharkhand**’ submitted by me in partial fulfilment of the requirements for the award of the degree of **Master of Philosophy** of this University is my original work. This dissertation has not been previously submitted for any other degree of this or any other University

Pawas Suren
Pawas Suren

Certificate

We recommend that this dissertation be placed before the examiners for evaluation

Amita Singh
Prof. Amita Singh
(Chairperson)

Dr. Jaivir Singh
Dr. Jaivir Singh
(Supervisor)

To
Forests

ACKNOWLEDGEMENT

The pursuit of the ideas in this work owes a great deal to my teachers, friends and well wishers. The Centre for the Study of Law and Governance, Jawaharlal Nehru University, proved to be a congenial and tolerant home for me to carry out research in a multidisciplinary field. Traveling requires that the pilgrim be well prepared for the arduous and unknown nature of the journey. In this task I owe sincere gratitude and respect to my teachers. Dr. Jaivir Singh laid the foundation in me of Law and Economics. His influence and ideas and gratitude through the works of Cooter, Ellickson and Coase, provide the wrap on which the weft of this work hangs. Dr. Navroz Dubash in critical institutional issues has been invaluable. Dr. Prateeksha Baxi has influenced me substantially to arrive at quite a few insights in relation to practical aspects of Law and Sociology. Dr. Jennifer Jalal taught me Research Methodology and a great deal more. Dr. Amit Prakash, I believe has not only helped me for the dissertation but also gave me a long way to go. Prof. Amita Singh has been a constant encouragement through out the study. They have spared no effort in the careful questioning and articulation of ideas in this work. My friends Shomi, Yirmayai, Deepak, Dhanya, Debajit, Nazia and Kazi have been perfect agent provocateur, and helped enormously through their interest in my field. My Aashita, who took care of me during each and every steps of this work like her child. My senior Almin, has been the most kind and helpful in reviewing the manuscript. My sincere gratitude to all the IFS officers whom I had been in touch with during my field work especially Mahendra Prasad, Y. K. Singh, R. B. Singh, R. K. Roy and J. Lognathan who took out time from their busy schedule to discuss important field realities. Praveen Weisely, a brother and a friend who took the trouble to take me to the field.

Finally, we all hear about the magic moments of M. Phil in the Centre for the Study of Law and Governance, when for a time economist, sociologist, Lawyers and people from other background come together around the central issues of common question. At those times, the spirit of inquiry kindles the spirit of discovery. In this process many are involved, only few can be explicitly acknowledged, but all can be thanked.

Pawas Suren
Pawas Suren

TABLE OF CONTENTS

Certificate	
Acknowledgement	
	Page Nos.
INTRODUCTION	1-14
CHAPTER-I OWNERSHIP OF PROPERTY	15-29
CHAPTER-II THE LAW OF NORMS	30-43
CHAPTER-III FIELD WORK REPORT	44-80
CHAPTER-IV FOREST AS PROPERTY	81-100
CHAPTER V NORMS OF COMMUNITY FORESTRY	101-119
CONCLUSION	120-122
REFERENCES	123-129

Introduction

Long dreamt dream of Jharkhand as a separate state came into being in November 15th, 2000. It is a plateau region (Chotanagpur Plateau) consisting of rich mineral deposits and covered with one of the best Sal (*Shorea Robusta*) forest of the world. The vegetation of the area mostly consists of tropical moist Sal forest type. Tewari (1995) wrote that Sal forests are commonest type in India, Nepal, Bhutan and Bangladesh. Sal (*Shorea Robusta*) is the dominant species which makes fifty five percent of forest in Jharkhand. Sal being gregarious makes a very strong coppice is valued for its wood. Myriad species of important non wood forest products (NWFP) are found in appropriate openings in the Sal forest (Corbridge et. al. 1999).

The beneficence of these forests complements the need of beneficiary apart from agriculture. Most of these beneficiary are tribal who migrated to this region around 11th century A.D. Tribal societies can be described as small in scale which are restricted in spatial and temporal range of their legal, political and social relation, having a morality religion on similar world view (Beteille 1974). This condition might be true for African tribes but in many Indian tribes such as Santhals, Gonds and Bhils are over a million in population who are spread over vast geographical areas and have been in regular contact with Hindus and Muslim who have been intruders in their bivouac.

In Jharkhand region there are about thirty different tribes. The dominant of which are Mundas, Santhals and Ho. The total tribal population is less than thirty percent, most of who practise animist faith known as Sarna. Sharma (1978), argues that tribal don't have sectoralised approach in basic aspects like the religious, social, economic and political, which is the dominant characteristics of advanced communities. Tribal in Jharkhand have distinct racial type, according to physical anthropologist they belong to proto-Australoid stock, and some time resembling a Mongoloid in appearance (Corbridge 2004). Tribal communities lack hierarchies they are the communities of common (Bailey 1961). The average land holding is less than five acres with poor laterite soil, pondered with poor irrigation facilities. Hence forest

becomes important for fruits, flowers, nuts, leaves, mushrooms and yame apart from fire wood, fodder and cattle grazing (Jewitt and Kumar 2000). The ecological setting of tribal village, socio- religious equilibrium and economic dependence makes it difficult to imagine a tribal surviving without forest (Anderson and Huber 1988).

Section 1: Life Style of Forest Dwellers

Mandelbaum (1970) describes the tribes of Jharkhand to be hard working but dominated by their “hedonistic” nature. They seldom worry about future and do not find pleasure in sweat and blood. This is reflected in their all night dances and *Dumkarias*. Among tribes the lineage or clan becomes the basis for land ownership, for defence, economic production and consumption. Cultivation among tribal is recognized for its economic rationality of distribution of labour among members of the same clan at the same time are criticized for their lack of motive of profit maximizing. Being hedonist they don't believe in surplus accumulation but in the satisfaction derived from prompt consumption and pleasure derived from immediate enjoyment (Schermerhorn 1978).

Tribal economy can be confined in three limited parameters of limited range of occupation, pre-eminence of agriculture and forestry (Naik 1974). Agriculture is done through communal land tenure. The best illustration of which can be given by Munda *Khuntkhatidari* system. In *Khuntkhattidari* system the right over land use is determined by clan leader who forms lineage of the original founder of the village. Among Mundas and Ho they are called *Killis*, *Khands* and *Khunts* in Santhals and *Khuts* among Oraons. Through clan membership, individuals of a tribe have direct access to land, which he claims to be the prime test of tribal organisation (Bailey 1961).

Bihar Land Reform Act 1950 gave recognition to *Khunt Khati* system where villagers got dual status as land lords and right holders in local forest. Agnatic bonds among tribal forms the fundamental web and hiring of agricultural labour is against the norm. Beteille (1974) described that among the Mundas, the Ho's, the Santhals and the Oraons settled agriculture is practised where family farm is a norm. Economic and social responsibility is the responsibility of clan leaders. The British Government doubted that tribal could rebel if they are left vulnerable to unscrupulous caste Hindu. To overcome this fear, enactment of 1908 Chotanagpur Tenancy Act (CNTA) and Santhal Pargana Tenancy Manual took place to protect tribal land rights in Jharkhand. According to the above laws, the protected tribal land could not be sold except with religious and industrial purpose but only with the consent of Deputy Commissioner. This act was amended in 1920 which allowed lands transfer possible within tribal community (Singh 1966).

1.1: Tribal Festivals in Jharkhand

Tribal life is interwoven with forest which can be seen in their beliefs and mythologies. Different indigenous festivals are Sarhul, Karma, Van Puja, Rog Har and Bishu Sikhar, out of which Sarhul is the most important for forest dependent population. Its celebration is marked by the flowering of Sal trees in the month of April and May. It's forbidden to bring Sal flowers and wild fruits before the advent of Sarhul as the anecdote of deadly snake bite come true. The custom favours the flowering unharmed till pollination and seed setting. During the festival the pahan (Village priest) do the weather forecast. He takes the water in pitcher to the Bonga (deity). If the water level decreases inside the sacred groves, the rainfall is expected to be inadequate. Increase in the water level means more than average rainfall. This has some scientific value as humidity starts building up in the month of April and May (Kumar 2004).

In Karma festival, Kadam (*Adina Cordifolia*) tree is worshiped. To propitiate the wild animal God, Van Puja (forest prayer) is done in the month of May. Rog Har a disease eradicating prayers is performed in some specific locations in forest. In many communities Bisnu Shikar is practised in which a wild animal is hunted and equal share is distributed among the house hold of participating villages (Kumar 2004). The villagers in tribal Jharkhand believe that trees propitiate the rain God in the way, mountains do. The Cukoo birds living in tall trees sing for the clouds to shower. Ancestral sprits, those are redoubtable are believed to live in these forests.

1.2 Role of Women in Tribal Society

Women in tribal society have greater importance than non tribal. This is evident from bride price in Jharkhand tribal marriages, paid as compensation by the groom family to the bride house. In agriculture, participation of women is comparatively higher as household works are equally divided among male and female members of a house. Tribal women marry late in life and enjoy greater freedom in their marital life and selection of husband, as their dependency is relatively lower (Omvedt 1982). Agarwal (1998) writes that women have clearly defines rights in community forestry but their access is very limited. The nature of works is gendered and is enforced by taboos, which further reduces the bargaining position. Witch craft accusation is a common tool to punish women who appear to cross the boundaries of existing social norms. The job in community forestry is mostly reserved for male.

Women are the chief fuel wood collector apart from many minor forest product collections. In many joint forest management initiatives, loss is mostly suffered by women in a male dominated forest protection committee. Agarwal (1997 b) opine that joint forest management can dilapidate women traditional usufruct rights to environmental resource as membership is a norm rather citizenship as a rule for resource use and institutionalizing property rights in communal property in favour of man. In similar vein Locke (1999) states the closer of forest for regeneration have ignored the previous obligation of women in using the forest. Establishment of fuel

wood cutting bans in protected areas have given birth to intergender and community conflict as fire wood collector have to go far away for collection.

Many development projects have epitomized women as environmental custodians while Joint forest management is considered to increase the drudgery of women fuel wood collectors in the absence of potential incentive to overcome potential restriction on their participation in forest based decision making (Jewitt and Kumar 2004). Involvement of women in decision making may not lead to empowerment as they have traditionally been excluded from decision making institutions, making expectation shorter in overnight development of gender interest by women in community forestry (Jackson 1994).

Section 2: British Forest Policy

Prior Independence as Shiva (1988) states, the British used Indian forest as an inexhaustible resource for their military supply. By mid nineteenth century concern about declining forest resource and the need to secure the future supply of timber for railway construction, ship building and military purposes resulted in the conscious effort to conserve forest (Jewitt 1995). As a result, in 1864 The Imperial Forest Department was created and in 1865 first Forest Act was passed. The imperial Forest Department adopted the 'Scientific Forestry' based on European Silvicultural principles with a motive of sustained timber yield. As a result traditional forest management system *dhya* or shifting cultivation which was considered to be a pernicious system by British officials, suffered a lot (Jewitt 1995a). The British view about traditional forestry was countered by sympathetic outsiders like Verrier Elwin who claimed traditional system not to be as destructive as projected by the British officers and supported it be in harmony with ecology (Elwin 1936).

In 1894, on the recommendation of Dr. J. A. Voelcker, a German agriculturist, the 1865 Act was strengthened to maintain a good forest cover, to prevent soil erosion and loss from agricultural reproduction. With the commencement of this Act the ancient management system was replaced and Indian forest was divided into four categories (i) Reserve Forest (ii) Protected Forest (iii) Private Forest, and (iv) Village Forest and waste. Anderson and Huber (1988) explained that reserved forest were solely for commercial purpose, except for the collection of certain minor forest produce and for watering cattle and lesser for grazing. In protected forest allowance were fixed and defaulters were penalised. Villagers were not allowed to hunt, graze livestock and cut timber for basic necessities in a protected forest. For commercial use village forest were assigned.

As proposed by many scholars the main purpose behind the restricted use of forest was timber yield and to overcome obstacles arising from burning, shifting cultivation, lopping and grazing. The Act was justified on the grounds that forest dwellers were not skilled to manage their forest without the support from British. In fact revenue collection was the main motive of the Imperial Forest Department. Corbridge (1991) explains the consequences of restricted forest use which resulted in the change in the lifestyle of forest people. The forest people got separated from their main means of subsistence which further dilapidate their traditionally regulated forest community.

Section 3: Post Colonial Forest Policy

The Origin of some of the forest policy can be traced back to colonial period. The retreat of British to their home land left many forest in the hand of zamindars or private land lords. The princely states were able to retain good proportion of countries better forests. Independence followed the drive for nationalization doubled the forest area under state control from 26.16 million hectare in 1946-7 to 53.83 million hectare in 1950-1 (Lal 1990).

After independence, the post colonial forest department maintaining the community of pre colonial rules and regulations. According to Guha (1983) scientific forestry was the backbone of the Forest Act of 1952 which empowered the state at the expense of the forest communities. In the name of 'National Interest' forest reservation and scientific forestry started supplying the unending need of growing industries, commercial, communication and defence requirements. This exacerbated not only ecology of forest but also the livelihood of forest dependent population had been traditionally dependent on forest as well as traditionally engaged in forest management. During 1950 many Chotanagpur Zamindars (landlords) felled their forest land before land reform.

Jewitt (1995) scathingly criticized the draft 1980 Act which retained eighty out of eighty four provision of 1878 Indian Forest Act, increasing the restriction on forest users and increase in penalties for breaching the forest laws. The draft 1980 Act was successfully resisted but traditionally weak political tribal population had to bear the consequences of restricted forest use. However the 1980 bill became the Forest Conservation Act 1980 without any changes in its basic features. Minor forest produce (MFP) in many states got nationalized requiring permits to be purchased by villagers before collecting any particular amount. As in many places adivasi in Jharkhand too started breaching forest laws exceeding their felling and grazing allowances in reserve forest (Corbridge 1991). Corbridge in his field work during 1981 saw many Jharkhand Mukti Morcha (JMM) activists setting fire in Sal woods.

Patil (1993) claims that it was during early 1980's when serious steps were taken towards social forestry after the reports of 1976 National Commission on Agriculture shed lights on fuel shortages and increase in absolute poverty in many rural areas. The canon was to produce and to take the harvest to the people rather involving them directly in forest management. Noronha and Spears (1988) reasoned the top down approach used by forest department and external funding agencies for the inconsistent result associated with social forestry.

National Forest Policy 1988 clarified that biomass need is above commercial demands (Jewitt 1995) but the top down structure gave the little space for the involvement of local people in the planning and management of social forestry. Women who are the main collector of fuel wood in many areas were ignored. Economically weak and socially marginalized members were often marginalized from the benefits of social forestry scheme by rich villagers, for whom it is relatively easy to afford necessary inputs and the time required for the trees to mature. Gadgil (1983) explains the numerous landless people who were forced by appropriation of village common by the state in the name of social forestry, depriving them from traditional access to the village forests. Eucalyptus provides few non timber benefits compared to native trees. In many areas they have replaced traditional agricultural crops with modern crops to fulfil the demands of paper industries (Shiva et. al. 1987).

Forest Department in India have always tried to keep its management simplified. To keep it simplified the forest department demarcated forest to separate from farm and adjoining habitation. Second, the Forest Department followed Scientific Forestry which resulted in collateral damage of ecology which resulted in the increase rate of degradation. During 1980's and 1990's steps were taken to increase the participation of local villagers in the management of forest, which is still in process.

Forest managed and owned by state were suffering rapid decline in decades before and after independence of India. The local forest users were accused as irresponsible towards forest, turning it into an open access regime. Nation Forest Policy clarified that biomass need is above commercial demand and understood the need to involve the local communities in the management of forest. In 1990 the Central Government asked the State Government to implement joint forest management to regenerate protected forest and reduce rural poverty. The everyday forest protection, management and development responsibilities were devolved to local communities' institutions at village level or panchayat level (Corbridge and Kumar 2004). In twenty six out of twenty eight Indian states including Jharkahnd, Uttranchal and Chattisgrah joint forest management have been implemented. By March 31st, 2001 there were 44,943 official joint forest management groups protecting over 11.63 million hectare of government owned forest or 15.5 percent of

the recorded forest area of the country , claiming largest such programme in the world (Borguyary 2001).

Section 4: Joint Forest Management in Jharkhand

As a result of JFM implementation, many village forest protection and management committee (VFPMC) in Jharkhand were set up where state reserved its monopoly rights of ownership in the state reserved and protected forest. Forest department is not ready to share its rights and revenues in reserved forest. The VFPMC manages the degraded protected forest. The day to day responsibilities were devolved to local users where each household pay nominal royalty. In 1994-5 as Corbridge and Jewitt (1997) writes the forest department share was twenty percent of surplus timber generated. New planting decisions are taken by the executive members of VFPMC's. The committee comprise of fifteen to eighteen members, out of whom three members are women and three members belonging to schedule caste and schedule tribe. The committee includes village Mukiya, Sarpanch or village Pahan. Forester is the secretary to the VFPMC's whereas forest guards attend by invitation. The participating houses in VFPMC's guard the forest in rotation.

Many products of the public forest are used as private goods by village elite who manage to capture village level forest institutions. Richer household are less dependent on forest. Kelkar and Nathan (1991) argue that in JFM the jobs are basically for men. Bullock carts or bicycles are used by men to collect fuel wood while women carry firewood on their head. The valuable minor forest products such as Sal, Mahua (*Madhuca Indica*) and Ryar (*Buchanania Latifolia*) are collected by men where as less valuable fruits, leafy vegetables, Sal leafs and Sal twings are collected by women. Even women exploit other women on the basis of marital status, seniority and social status (Locke 1999). These gendered divisions of labour are enforced through taboos. Women are forbidden from ploughing, hunting, roof making, and carrying items on their shoulder (Roy 1984). In Tribal community *Madad* system is prevalent according to which in the absence of male members, labour from the male member of the same community is asked in exchange of food, and rice beer per day.

Further as women are not able to do forest watch they pay money for timbers. Many landless labours and marginal farmers provide labour in JFM not just to secure a fair wage but also to build up social capital to cope up with limited means of survival (Kumar 2002).

Kumar (2004) has raised two important questions, first, how much impact has the JFM programme on the pattern of extraction of wood (timber and fire wood) and non wood forest products (NWFP) by different group of villagers? And second, how consistent with the principle of social justice are the observed pattern of cost and benefits over different time period?

Coppicing in commercial scale usually takes five to seven years which makes villagers sceptical about forest department attitude (Corbridge and Jewitt 1997). Kumar (2004) opine that JFM in India neglects two important field realities. First, the village community in tribal areas are often highly stratified in terms of assets and pattern of social inclusion and exclusion regarding forest access. It's wrong to assume community as undivided, communities are institutions and they should not be defined in opposition to the state or the market as its ostensible that members of any community are active in all three spheres of social life (Corbridge and Kumar, 2004)

And second, benefits as well as cost of forest regeneration can vary widely in different sites and across time. On the basis of survey figure he argues that the extraction of fire wood averages Rs. 1690 Yr-1 hh-1 in value in non joint forest management forests compared to Rs. 945 Yr -1 hh -1 in Joint forest management forest. Where as the value of non wood forest products (NWFP) extraction averages Rs. 945 Yr-1 hh-1 in non joint forest management compared to Rs. 417 Yr-1 hh-1 in joint forest management forest. The finding force us to doubt the popular belief that forest regeneration through JFM or by community protection will always increase the value of non wood forest products NWFP's extracted. The possible reason sighted by Corbridge and Kumar (2004) is that under joint forest management, rigorous protection increases forest density greater than 0.4, under which Sal trees makes up over 80 percent of the forest. This increases the timber value but at the same time reduces their non wood forest products (NWFP) on which the poor household and landless depend.

Joint forest management is criticized on the basis that villagers are still engaged in the unequal relation with Forest Department officials. In most of the state the secretary ship of the executive committee responsible for village protection and management activities are held by a forest officer. Most of these villagers are sceptical about reliability of the government assurance of sharing money earned from future sale of regenerated timber. Corbridge and Kumaar (2004) have challenged the suggestion that poor forest dependent household will necessarily be empowered by transfer of rights and responsibilities from the state do the community. Timber preference by richer farmers has distorted JFM regime and have discouraged the collection of non wood forest products by poor women and men (Kumar 2002).

In the essay “Community, Corruption and Landscape”, Corbridge and Kumar (2004) told a story of a school master living 40 Km away from Ranchi city in Ranchi District. In order to sell his ten mature jackfruit trees he contacted a dalal (middleman) and agreed to sell the trees to the broker in just Rs. 20,000 whose actual market price exceeds Rs. 100000. He did so to overcome writing application providing measurement of each trees (height, girth and serial number) endorsed by mukhiya of his gram panchyat, revenue circle officer (who certify that the trees belong to the applicant) and local forest officer (who certify that trees are not standing on recorded forest lands and that s/he has no sylvicultural objection to their felling). If every thing went without objection a fortuitous meeting with DFO (Divisional Forest Officer) can be as high as eighty futile attempts. In the absence of DFO the subordinates might ask for “commission”, then for the transfer of file within the office may require assistance of eight staff, increasing the time and financial costs. Finally on the way to timber depot money is to be paid to several check post for the uninterrupted transit (mostly delay and unloading) which can be on the grounds of unmatched size and shape written in the documents of transit permit.

In Chottanagpur, largest landowners are tribal both in mixed tribal and non tribal villages. The better off tribal families are farming four to eight hectare of good quality land. The dalal or middle man described in the fact belongs to the same clan as the mukhiya. This middle man built his reputation as a person who could bring Sarkar to the village. He develops political network with local Member of Parliament (M.P.) and Member of Legislature Assembly (M.L.A.) by assuring their re election or vote fixing and gains in return contractor ship that link state to the citizens with a steady flow of government fund. Robbins (2000) marks that state and community are not easily distinguishable in rural India separated by porous boundary.

As far as moral economy literature is to be relied, one can be sanguine about JFM to be beneficial for the collective good in the tribal belt of central India but results are deploring. The collection of NWFP is declining as the stringent system of forest protection is being practised imposing harsh fines for improper collection of wood and NWFP. The emphasis on Sal trees leads to an early canopy layer which impedes the growth of many NWFP. Kumar (2002) regrets, that money reaching the poor and land less in forty years will be negative. The opportunity cost of providing protection to the forest by the small and the marginal farming households and to the landless will out weight the probable benefit.

Corbridge and Kumar (2004) believe that reform in favour of common property regime need to be made in tandem with the Forest Department reforms. The empowerment of poor and small holding peasants can be achieved through policies that would allow marketing of trees from private property in a way where the state regulates the activities of timber merchants and supplies market information to the seller to avoid transit permit system that places burden on law as well increases transaction cost upon the seller.

Section 5: A Step Forward

The existing literature on forests of Jharkhand and forest policies in India, whose summary has been presented, circles around social and cultural aspect of the people involved. Jharkhand is a tribal state and most of the work conducted in Jharkhand discusses on tribal affair but tribal are less than twenty seven percent and in reality we are likely to interact with non tribal more than tribal. Some authors have tried to study forest and its associated lives from common property point of view but the study requires a deeper understanding of property as the notion of property search for the ways of assigning ownership rights. It tells about the duties and responsibilities of owner as well as non owners in their conduct to the property. In community forestry the dimension of private ownership has been ignored and does not answer things which could be privately owned in a common property resource.

In a common property resource like community forestry scholars have described informal norms and cooperation for the successful management of common property resources but have missed to locate the source of these informal rules of cooperation, their origin, evolution and decline. In the study being conducted an attempt has been taken to fulfil the lacuna in the existing literature in the shadow of law. The study conducted is to demarcate the validity of the assumption “In a close knit group, members of the group develops and maintains equilibrium selection norms, which conjoin to produce maximum aggregate pay off”. In simple language it means that members of a tight social group will informally encourage each other to engage in cooperative behaviour. The aim is to find the role played by formal rules and informal norms in setting entitlements for members of the community forestry.

In the first chapter “Ownership of Property” I have tried to present ownership as a relation to the property, describing private property and common property in the light of existing theories. Various issues associated with the management of common properties have been dilated with suggestive solutions pointing towards norm. The second chapter “The Law of Norms” an effort has been made to collate works of different scholars to understand norms, their origin and decline. Interplay of law and norms in complementing each other has been elucidated. The chapter ends in the

application of norms in common property resource suggesting ways to channel norms to bring efficiency.

CHAPTER 1

Ownership of Property

Across generations transacting human civilization, contestations for allocation of resources and distribution of wealth have been unending. Property from legal point of view is understood as a bundle of rights or as a basket of rights. The law of property gives the legal frame work for the allocation of entitlements in forests and distribution of its resource flow unit. Cooter and Ulen (1994) presented the Marx and Engels's view of property as institutions by which few enslave many, acknowledging Blackstone (1965) attempt to understand property as complete control over resources and this complete control as the source of all other rights over resources, in addition to Gluckman (1965) discovery of property in Barotse Tribe to be owners responsibility for the prosperity of their fellow man. Honore (1961) in his essay "Ownership" defined ownership as;

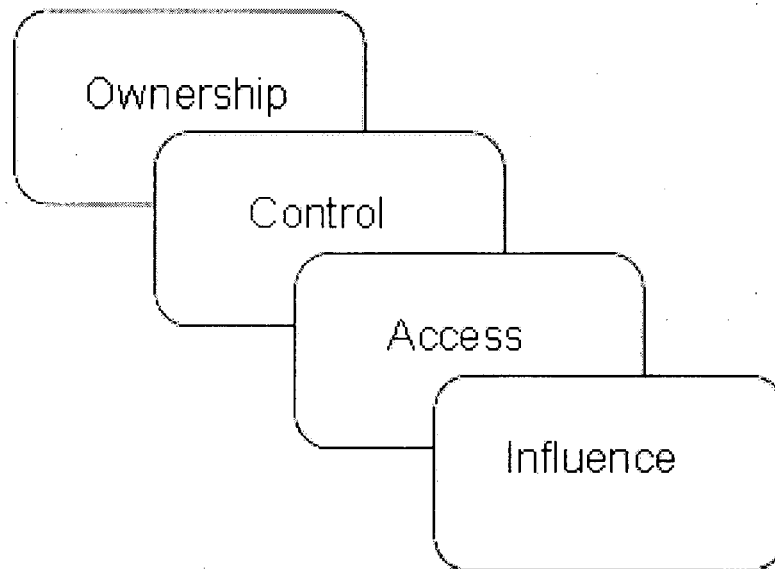
Ownership comprise the right to possess, the right to use, the right to manage, the rights to the income of the things, the right to the capital, the right to security, the rights or incidents of transmissibility and the absence of term, the prohibition of harmful use, liability to execution and the incidence of residuary, this makes eleven leading incidents. Obviously there are alternative ways of classifying the incidents; moreover it is fashionable to speak as if it were just a bundle of rights in which case at least two items in the list would have to be omitted.

Lametti (2003) described property as a relation and property as an object. The concepts of property in forest as a rule of thumb embrace itself in the redistribution of social wealth from forests and to derive rules to control it. Penner (1997) understood property to be about resources which might be tangible things or intangible forms of wealth. Tangibles things in forest include fuel wood, non wood forest produce (NWFP), wood for agricultural implements and house making. Intangible things include fresh air, good rain and less pollution. The term object of social wealth was coined by Harris (1996). To be an object of social wealth resources must be in one or the other way objects of desire and less in supply than demanded. These resources are in some way separable between individuals. Tangible things of forest once collected become separable for the collectors and leads to the reduction in its availability in forest.

All human beings interact with their physical environment. The interaction with forest may be for food or for shelter. These interactions establish relationship between person and forest. This property relation will entail allocation or distribution of forest, no matter the forest is held in common or individually. This relationship distinguishes “Property” from “Ownership” which according to Munzer (1990) is considered to be paradigmatic property relation. The relationship between the owner and the fragmented bundle of forest rights is settled through forests..

The ownership rights or rules allocating benefits from forest to the people has been the major achievement in the distribution and allocation of forest resource. Honore (1961) brought the notion of “Title” to reveal rules on how ownership is acquired and lost and how claims to a thing are to be ranked *interse* through “Modes of acquisition” and “Modes of loss”. The ownership of forest should be confined to a person or a group of people with the best title to the forest out of all possible claims. Right to alienation is the most important concept of property which if ill defined in forest will lead into inefficiency as it reduces the tradability of rights (Demsetz 1967). Efficiency requires allocating forest rights to the party who value it most (Cooter and Ulen 1996).

Seely and Deverux (1996) illustrated a hierarchy of categories of valid claims or property rights applicable on forests as shown in the figure 1.1. Control refers to the rights of conferring use and exclusion of forest resource, access indicates rights of use only and influence is the minimal rights which has some say over assess control and ownership of forests. Ownership gives right to use and benefit from a forest, to rent the forest to others or to sell it and to exclude others from benefiting from it or from reducing its value (Hodge 1995).



LEVELS OF PROPERTY RIGHTS

Figure 1.1

Cooter and Ulen (1996) presented “endowment” as an initial assignment of ownership. Stephen Devereux (1996) attempted to assign ownership, control and access to endowment, and access to the benefits or utilities derived from forests to entitlements. In Common Law and as well as in Civil Law entitlement is most powerful interest possible in a resource as well as series of lesser entitlements in the same resource (Lametti 2003). Forests are limited unlike unlimited desires. Hence some forests are to be held in private where as others are to be taken as public.

Section 1: Private Property

Scarcity of forest resources is an important characteristic which require proper allocation and distribution. Private forests are one specific mode of allocating forests and governing their use (Lametti 2003). It's difficult for private forests to exist where resources are plentiful and unlimited as the need and justification to exclude others does not exist. Private forests place the maximum control over resource in a single hand (Donahue 1992). Rivalrous and excludable goods should be controlled by individuals or small groups of people, whereas non rivalrous and non excludable goods should be controlled by a large group of people such as state. Purely private goods that the economist describe posses the characteristic of one person use preclude another. This preclusion leads to the germination of rivalry in the consumption of private forests (Cooter and Ulmen 1996).

As Welch (1983) pointed out, most economists consider private property to be an essential ingredient in economic development due to incentives associated with diverse kind of property relationship. The notion of private property came first, as it can be justified only in reference to private property, thus conception of the basic concept of forest resources should be started with private forests (Harris 1996). When private property rights are defined over forest they are relatively easy to enforce. The vested control over private forest in a single person hand gives ability to exclude other from access to or use of forests. This is not only a relationship to forests but also a relationship with other individuals with respect to the forests.

The ways of assigning value to a particular forest guide its use and exchange (Penner 1997). Any forest institution will exhibit the "ownership spectrum" and "trespassory rules" (Harris 1996). Ownership spectrum ranges from limited rights of bundles of use privilege and controlling power to full blooded ownership in a single person hand whereas trespassory rules protects the power in the bundles of the spectrum. The points in the spectrum resemble a bundle of private forest rights. Lametti (2003) accepts Harris spectrum with a discontinuity. The power to alienate is not available in the least powerful bundles of forest rights but is available in most powerful bundles of ownership reaching full blooded ownership at the upper end of the spectrum.

As the spectrum is crossed, passing from least powerful bundle of forest rights to the most powerful, the quality and the number of sticks in the bundle increases. Lametti (2003) claims that from Harris point of view that private property rights over forest is one of the owners of different categories of bundles all over the spectrum. Different means of holding a forest resource do not represent the same powers and calling these powers 'ownership' is confusing and misleading in terms of nature and degree of rights one possesses. Spectrum metaphor is misleading as entitlements or property interests over forests defies adequate arrangement and the label of ownership attached to all of the points on the spectrum for substantive and philosophical reasons. The full blooded ownership in the end point of the spectrum does not adequately have practical applicability. Hart (1977) admonishes that the paradigm of absolute ownership is dangerous as it strives for undesired which is impossible to attain.

The "Exclusion Thesis" given by Penner (1997) as the justification of exclusive right of owner of a private forest to exclude others. He argues that the fundamental interest underlying forest in terms of norms, the understanding of norms in relation to private forest as the duty of the non owners not to interfere with the property of others. In Common Law as well as Civil Law the property relation changes with the type of resource, with different rules for moveable property and immovable property (Lametti 2003). The property rights of owners and obligation of non owners will also differ with different social resources. Under utilization of resources resulting from too much of private forest without any limit on it, leads to "tragedy of anti commons" (Heller 1999). Buckle (1991) simplifies Aquinas's understanding of property stating, property is a natural right and private property is the result of human derivation.

Private forests have a "social aspect" as propagated by Harris (1996). Lametti (2003) supporting Harris view states, private forests are necessarily social because of its structural asymmetry and underlying value and purposes human survival, human development and flourishing, and so on coupled with its scarcity. The allocation of a forest as a private forest creates distributional and power inequalities; have and have not. Any act on resources of forest, even its consumption changes the normative status of another person. That is a person can unilaterally eliminate or change the duties of others not to interfere with a particular forest. As the focal point or filter for property rights and duties, objects of social wealth are necessarily social as are the

relations that govern them. This recognition of forest's social aspects requires human beings to explain private forest and justify its power, and in particular forces everyone to focus on the use made of resources of forest and the general purpose of forest institution. In short, resources of forest are social because of its social dimensions and implications.

Common Law and Civil Law primarily deals with private property leaving room for common property either by explicitly designating some property as common in civil code and regulating it accordingly by recognizing it in some jurisprudential maxim or just leaving common property aside to regulate itself (Ostrom 1991). Private forests are the outcome of societal decision and scarcity, its justification which is fulfilled by providing a degree of excludability to the resource previously held in common.

Section 2: Common Property

English Jurist, Henry Summer Maine, with his publication Ancient Law in 1861 challenged the superiority of individual property holding (Grossi, 1981). He admonishes that joint ownership and not separate ownership is really archaic institution. Drawing clear lines of rights and duties in community forest is always debateable and leads to inefficiency. Cheung (1970) pointed that rent dissipation is a major problem because no one owns the product of the resource until they are captured. Coase (1960) debated communal owners trying to devise rules to reduce externalities of mutual overuse of forest leads to higher transaction and enforcement cost. In common forests no one has incentive to work hard to increase their private return which results in low productivity (North 1990).

North, Anderson and Hill (1983) view community forest institutions as having a longer history than private forest institutions and reasoned the growth of modern Western societies in part as the result of changing common property to private property. Ellickson (1993) wrote that when settlers move into a new terrain they face high risk from strangers, harsh environment. In addition to these their lack of knowledge leads them in developing one large common parcel. As time passes forest land becomes scarce and conflicts on matter of different rights over forests guide individuals to enclose land through fencing or search for institutional means to protect their investment. The more the amount of forest within the closer, lower becomes the cost of defending all the boundaries but the cost of regulating the use of enclosed forest gets high (Ostrom 2000). When the marginal return from the enclosed plots exceeds the marginal cost of defending a much more extensive system boundaries and high cost of bargaining, dividing private plots of forest becomes efficient (Nugent and Sanchez, 1999).

Gordon (1954) noted that asset in which every one claims a non distinguishable claim is no ones property. Forests to which access is open are overused and it is in the common interest to restrict overuse. Netting (1976), pointed characteristic for a resource to be held in common. First, value of the production per unit area is low. Second, the availability of resource per unit area is available. Third, return from investment is not guaranteed and it's mostly low. Fourth, it's more economical to use a large area and fifth, it's more economical to build infrastructure to utilize large areas. Forests fulfil all the above characteristics to be a common property.

Hardin (1968) called the overuse of common property resource as "the tragedy of commons" arguing that "freedom in the commons brings ruin to all". Ciriacy, Wantrup and Bishop (1975) differentiated property regimes that are open access and property regimes that are common property. In open access forests no one has the legal right to exclude anyone from using a resource, where as in community forest the members of the clearly demarked groups have a legal right to exclude non members of that group from using the forest.

TH-16093



“Common Property Resource” is frequently used to describe a type of economic good that is better referred as “Common Pool Resources”. Like public good, common pool resources share the difficulty of developing physical or institutional means of excluding the beneficiaries (Ostrom, 2000). This leads to the problem of free ride in community forests. Free ride tempts for a suboptimal inputs in improving the resources of forest, monitoring use and sanctioning rule breaking behaviour. The common pool resource shares the similarity with private goods that one person’s consumption subtracts from the quantity available to others. Hence, community forests face the problem of congestion, overuse and potential destruction. Blomquist and Ostrom (1985) clarified the resource system and a flow resource units or benefits from these systems. Lueck (1995) wrote that resource system is what leads to generation of a flow of resource units or benefits over time. For sustainable development in relation to forests it becomes important to devise property regimes that limit access to forests and other rules that limit the amount, timing and technology use to withdraw diverse resource units from the forest.

Sengupta (2004) argues on two major branches of theoretical works on CPR. First is moral economy approach. Second is a formal mode of rationality of cooperation. The former was developed to explain situation of local forest communities which are not under the strong influence of markets. Latter uses game theory as a convenient means to explain cooperation for community forest by undifferentiated players in a static setting. Olson (1965) raised the question of collective action. He argued, as the number of the members in community forestry starts increasing the cooperation becomes difficult. Baland and Platteau (1999) opined that small groups performed collectively better. While Agrawal (2000) showed that moderate size groups are more efficient. Ostrom (2000) indicates that changing group size will lead to the changes in the following. First, an increase in the transaction cost of reaching agreement and second, a reduction in the burden borne by each participant for meeting joint cost such as guarding system and maintenance, and third, an increase in the amount of assets held by the group could be used in the time of emergency. Further she opine that group heterogeneity along many dimensions including their assets, their information, their valuation of final products, their production technologies, their time horizons, their exposure to risk as well as their cultural belief

system in addition to their knowledge and acceptance to local community forests are likely to lead to their undoing.

Jodha (1985) warned the role of market forces in the decay of community forests. The increase in the commercial demand of timbers from forests is a threat to communal tenure. On one hand Sengupta (1995) claims CPR activities have traditionally been based on market exchange where as on the other hand Sengupta (2004) dilates that market penetration definitely weakens existing CPR but organizations are required as market exchanges are not able to assist every type of transaction. Economic transactions arise to overcome market failure. Hence existence of community forestry too can be linked to market failure.

After market, another factor which influences the output from community forestry is equity. Dayton-Johnson and Bardhan (2002) showed the relationship between inequality and economic efficiency in CPR to be U- shaped. In a given condition where agents can interact freely without any intervention by regulatory authority there is nothing like one to one relationship between inequality and collective action (Bland and Plateau 1999). Netting (1992) focused on another dimension of inequality in community forestry. He said inequality is not the return from institutionalized community forestry but equality resides in the governance of community forests which includes exclusion of non members, limits on use by the members and giving equal opportunity to all members in rule making and monitoring.

The absence of contractual relations governing the members of a group makes the right of control collective in community forestry (Seabright 1993). He enlightened on “production plan” and “implementation plan”. According to former social choice theory points out that the existence of an optimal collective management policy cannot be taken for granted and the mechanism to decide upon such a policy may be vulnerable to strategic manipulation. Latter is about the information required for management of community forest will be reduced if it is assumed that the management policy for a resource can be determined separately from the policy implemented. In community forestry, because of the absence of the binding agreements, central implementation can be applied. The central implementation will generate negative externality by allowing consumption by one agent. To overcome

investment externality in community forestry all members should consume less of the resources than their private incentive and invest more of there other resources in maintenance will enhance the community forests value.

Individuals accessing community forest face the problem of collective action repeatedly. Economists have tried to understand cooperative behaviour in terms of long term individual gains unlike anthropologist and sociologist who emphasize on human behaviour. They use the theory of repeated games to explain cooperative behaviour which grows out of self interest. Seabright (1993) point's repetition can sustain cooperation in spite of temptation to defect for the fear of loosing benefits of cooperation in future. He specified three conditions for cooperation. First, the future must matter enough to out weight the immediate benefits to any individual failing to cooperate and other players must have at their disposal retaliation that hurts the deviator sufficiently in future periods even when future payoffs are discarded. Second, retaliatory strategy must be credible which means that once an individual has defected it must be on others interest to put the retaliation into effect. And third, the benefits of cooperation in the future must themselves be sufficiently probable to act as an incentive to cooperate.

Different formal and informal means have been derived to generate cooperation. Uncooperative behaviour by an individual is countered by withdrawal of cooperation by others. Cooperation is followed by rewards and non cooperation is punished by customary practices or enforced by appeals in court or other institutions of arbitration. Bardhan (1993) points, conventional wisdom in much of the economies favour the establishment of defined private property rights in community forestry to reducing uncertainty and inducing individuals to husband forest carefully to internalize externalities. Privatization of community forest will result in distributional hazards. At the same time privatization of community forest has limitation to internalize every externality. Privatizations of community forest are seen as unfair by previous users who later respond to it notoriously. Ostrom (1991) argues that nationalization of forest resource has been advocated on the ground that local villagers could not manage it. Nationalization and its management by distant bureaucrats lead to inefficient utilization of local information and initiative. Further ineffective or corrupt

government initiative depletes traditional control structure and leads to over exploitation by influential interest groups.

Bromley (1989) claims community forest acts as private forest for a group who have the right to exclude others from use and decision making. In the figure below the pyramid under claim is inverted to indicate that the strongest claim on community forest in most developing countries rests with the state. Individuals have the weakest claim that might have to pay taxes for access. Unlike claim, entitlement increases as the right to community forest decreases. The village leaders or the head of the local forest institutions derive sufficient amount of income from the patronage gained in distributing usufruct rights. The taxes levied by state from right holders of different level are different, with minimum from those having simple access rights with minimum effort by the state to collect them. Devereux (1996) explains that the existence of these transaction rules clarify and reinforce different claims, property rights and relationship between all the individuals and institutions involved.

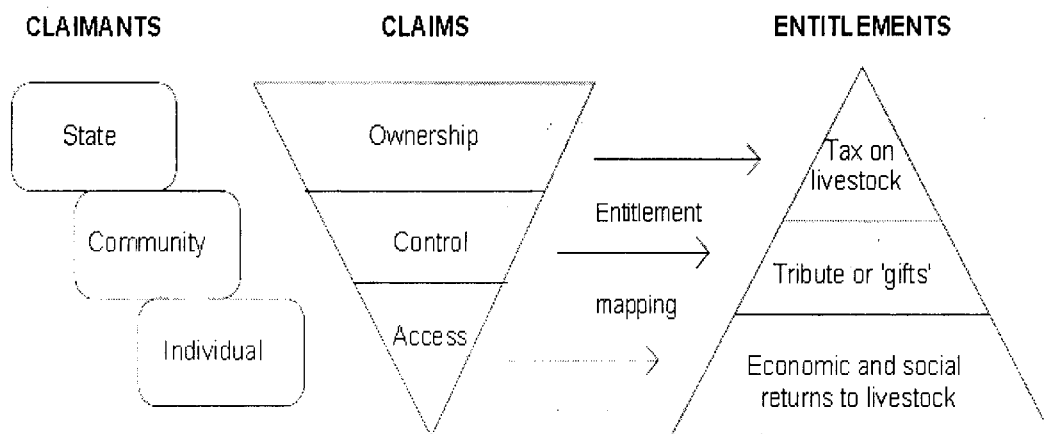


Figure 1.2 From Devereux (1996)

Seabright (1993) argues that having an individual or firm own the forests, will lead to the resource being allocated in a more efficient way at the same time any private property right requires specifying enforceable and appropriate contractual relation. Private contractual rights may breakdown the pre existing cooperative mechanisms that have evolved among the beneficiary of community forestry. With privatization changes bargaining power between those who depend upon the forest

and those who acquire property rights. Privatization makes latter stronger undermining mutual dependence which was previously the source of cooperation. Privatization make rights tradable and affect the mechanism of informal cooperation like reputation for cooperation or the threat of retaliation which further depends upon reasonably long horizon.

In community forestry dependents meets and decide to reward cooperation and penalise defaulters (McCloskey1976). Allowances are common in community forests in comparison to price based like taxes as they regulate the depletion of resource better (Weitzman 1974). Seabright (1993) opine that prevalence of quotas is comparative ease with which they allow decentralization of monitoring process. Management of community forest involve different degree of involvement of different members. At higher level managerial responsibility is delegated to an agent to manage the asset on others behalf. In intermediate level smaller group of agents are chosen by the larger groups in other activities like monitoring and policing. When state manages the forest resources the chain of delegation is relatively longer. The citizens delegate to their political representatives who delegate to government ministers who further delegates to senior civil servants who further delegates to junior civil servants. Such long chains might be feasible for non local commons but for local commons such as community forest shorter chains of delegations are more appropriate. Individual Transferable Quotas (ITQ) system is referred as a form of privatization claiming full ownership rights (Ostrom 2000).

Property rights that are most commonly observed in common pool resources according to Schlager and Ostrom (1992) are first; access, to enjoy non subtractive benefits like hike, canoe etc. Second; withdrawal, activities like catching fish or diverting water, in which resource units are obtained. Third; management, to design internal use pattern and change towards improvements. Forth; exclusion, the discretionary power to determine who will have access rights and withdrawal rights and how to transfer those rights. Fifth; alienation, the maximum control to sell or lease management and exclusion rights.

Bundles of rights associated with position

	OWNER	PROPRIETOR	CLAIMANT	AUTHORIZED USER	AUTHORIZED ENTRANT
Access	X	X	X	X	X
Withdrawal	X	X	X	X	
Management	X	X	X	X	
Exclusion	X	X			
Alienation	X				

Figure 1.3

Ostrom and Schlager (1996) defined five classes of property rights holder: 'Authorized Entrants' are those who purchase an operational right to enter and enjoy the natural beauty of parks but are devoid of harvesting forest products. 'Authorized Users' are those who have both entry and withdrawal use rights. 'Claimants' have rights to manage forest resources that include decisions concerning the construction and maintenance of facilities and authorities to derive limits on withdrawal rights in addition to access and withdrawal rights. 'Proprietors' have the same rights as the claimants with an advantage of the rights to determine who may access and harvest from forests. The rights of alienation is possessed by owners who can transfer forest produce in any way he wishes without harming the physical attributes or use of other owners, in addition to rights possessed by the proprietor.

In the absence of physical and institutional mechanism, community forest arrangement allow corporation to adopt production activities which is not possible under individual property rights (Ostrom 2000). Apart from environmental factors she from the work of different scholar's collated variables related to the attributes of the participants, conducive to the selection of norms, rules and property rights that enhance the performance of community forestry are as follow

- 1.) Relevant information regarding the condition of a resource, expected benefit and cost involved are available at low cost.
- 2.) Participants adopt a common goal and are aware of potential benefits and risk involved in bringing changes in the norms and rule.
- 3.) Internal social capital is developed through generalized norms of reciprocity.
- 4.) The group utilizing the resource must be stable.
- 5.) The members should know each other very well. They should have lived together for sometime and are expected to live together for a substantial future time without discounting future.
- 6.) Transaction costs are avoided by using collective choice rules that falls between the extremes of unanimity or control by few.
- 7.) Participants develop accurate and low cost monitoring and sanctioning arrangements.

The variables mentioned above are many times embedded in larger regime. When the legitimacy of these variables are recognized by larger regime as facilitators of local self organization they are ought to be provided with accurate information about forest resource system, support in discovery and conflict resolution process and provide mechanism to boost local monitoring and sanctioning procedures toward effective rules over time for better governance and management (Ostrom 2000).

In community forests it becomes difficult to point out the attributes of physical (quantity, space, technology) and social (involvement of participants' group size, heterogeneity) system which are important for the success of individual withdrawal rights from common pool resource (Ostrom 2000). Seabright (1993) elaborates that historical consideration plays an important role in making the cooperation work. Past determine future as cooperation is expected in a place where it was found earlier. Cooperative institutions work more successfully when they are embedded in a society

where collective action had worked in past. When the means of communication between players are not effective, historical past may enable them to coordinate with the one they had trusted earlier.

The trust is a function of past traditions and institutions. Hence institutions can channel trust. In many poor countries the voluntary organizations promotes plays, festivals and sporting activities among groups not just because activities intrinsic value but because they understand the importance of building trust and means of Internalizing norms. Trust act like capital good embodied either in Individual or the organisation to which they belong and becomes the reason for some institutions to efficiently transmit reputation across cohorts of member. It becomes a stable variable which makes the prediction easier about future cooperation irrespective of the immediate payoff of the present cooperation (Seabright 1993).

Section 3: Summarizing Property

Forest is a property which exhibits the characteristics of both private property and common property. Forests as common property is an archaic institution and came before private ownership of forest. The institutions of forest can only be understood best as a private property. When a community manages the forest it acts like a private property of the community for other communities whereas it acts like a common property of the members of the community that manages it. The property of forest has a bundle of sticks where the quality and quantity of sticks varies from the least powerful rights to the most powerful rights. The quality and quantity of sticks in a bundle increases towards the full blooded ownership.

The quality and number of sticks for the members of the community forestry are higher than the non members. The quality and the quantity of the number of the sticks in a bundle are highest for the government as an owner. Contrary to this if we only examine the numbers of the bundle then it increases away from the full blooded ownership of the government. The possessor of higher number and quality of sticks in a bundle decides for the possessor of lesser number and quality of sticks in the bundle.

CHAPTER 2

The Law of Norms

Bible tells the parable of ants, one of the smallest living creatures who don't have commander, to instruct what to do and what not. Yet these ants go individually to do their shared part of collective work of their group. Sociobiologists are doing a noble job of investigating social insects like ants and bees that lives in commune. Why do animals of different species interact with other to mutual advantage? Similarly when it comes to human beings we expect cooperation as a norm to gain membership.

Axelrod (1986) writes that in a given setting norm exists which guides a person to act in a particular way and get punished if not acted accordingly. Norms like laws are recognized easily than define (Basu 1998). When a person eats in a restaurant he has to pay food bill in accordance with the law and pay tips in accordance with the norms. According to Posner (1997) norms are like rules of etiquette, norms of proper dress, table manners, rules of grammar, customary laws in pre political societies and private associations which are neither promulgated by an official source such as court or a legislature nor enforced by that of legal sanction. Norms control selfish behaviour. Norms pay to the society as a whole rather than individuals (Durkheim 1972).

In English language the word norms denotes behaviour that is normal and behaviour that people should practise or pretend to practise to avoid punishments (Ellickson 1991). The glue that brings order in a society does not come from law enforcement but from informal enforcement of social mores by acquaintances, bystanders, trading partners and others. These acquaintances, bystanders use negative gossip and ostracism to discipline malefactors whereas esteem to enhance trading opportunities to bounties (Ellickson 1998).

Posner (1996) described norms as a rule that distinguishes desirable and undesirable behaviour and gives a third party the authority to punish a person who engages in undesirable behaviour. A norm defines means and extent by an individual to punish a person who engages in the undesirable behaviour. A norm defines means and extent for individuals to satisfy their preferences. Norm is similar to law where a private actor sanctions for norm violation.

Section 1: Genesis of Norms

Ellickson (1998) endorsed that norms are made to enhance welfare of the members of a group that accept and practise them. In a close knit group distribution of power is broad and information regulating informal control passes easily among members. Repeated play is predominant in close knit society and players are not mere acquaintances (Ellickson 1991).

In comparison to the close knit group cooperation in a loose knit group is not necessarily less but their mechanism of genesis and enforcement are different. In a loose knit group there are cluster of individuals who are unlikely to repeat game or interact. Intermediate knit group's lies between close knit group and loose knit group in which strangers interact with other strangers in the presence of non strangers (Strahilveitz 2003). In a close knit group a supporter of a football team is more likely to witness team performance in a match if the information informs him that all the neighbours are going to witness. Contrary to this, in a loose knit group a supporter is less likely to witness if the information says that turnout is likely to be less than average. In this chapter and dissertation, my discussion on norms are confined to close knit groups.

Different scholars have tried to answer the origin and evolution of norms, their sustainability, their enforcement and decline. It is a matter of common observation as Basu (1998) writes that there is no society in which stealing anything from anyone is considered legitimate because it will destine itself towards chaos and finally wither away. A society practising such a norm would not survive and so the norm. Norms

tend to motivate people not to free ride on large social provision (Hardin 2000). As we correlated ants and bees of our parent question, in the beginning of this chapter to human being, we find that most norm theorist generalize maximization of wealth or social welfare as the cause. Although most of them do acknowledge the importance of obligation, it is Mitchell (1999) who emphasised norms as obligation. Norms are reason for actions and they are reason because those who comply with them are compelled to perform particular actions out of sense of obligation. He dilates that if nothing else is true about obligation it is the fact we some how feel the need to comply with them.

Norms dictates behaviour not only to avoid sanctions but also to provide reason to our actions (Hart 1961). Action expresses meanings (Simon 1991). The meaning of action is dependent on the existing social norms (Sunstein 1996). Elliot Aronson (1980) a social psychologist describe three empirical ways in which norms might affect behaviours. First he describes obligation as compliance, behaviour live as long as it assures reward or the fear of punishment. Second, in the pursuit of conformity, a person desires to imitate others behaviour, to win the approval of those about whom he/she cares a lot. Third and last is internalization of norms, which generate the belief that norms are right and they ought to behave in the right way. The internalization of norms brings stability to the norms. Ellickson (1998) regrets the negligence of Anderson proposal by norms scholars which refers to the status of the person.

Scholars using socioeconomic paradigm believes that social norms are function of actor's environment and it shapes actors intrinsic predisposition (Etzioni 2000). Intrinsic predispositions are peoples biological urges under the shadow of culture. It refers to the actions that an actor would channel his effort to satisfy his preferences. Preferences are specific predisposition. Posner (1996) treat intrinsic predisposition as a part of environment, as one more constraint under which an actor labours. If intrinsic predisposition is taken as another environmental factor rendering cost and constraint then their chances of being violated gets higher as the gains from abiding them decreases and gains from violating them increases. Above all, law works best and are needed least when social norms are intrinsically followed (Etzioni 2000).

Cooter (1996) professes norms to be practical because they guide behaviour. Norms evolve over time in response to the influence brought on supply and demand by changes in science, technology, scarcity and demography (Ellickson 1998). A community enforces its norm by non legal punishments. The most extreme of these are ostracism. The effect of norm is seen ex-ante, where the fear to encounter guilt duress compliance (Sunstein 1996). Less extreme enforcers are village gossip, reward, reputation and status that govern the collective behaviour. A person responds to his understanding of what others think. Individual rationality and self interest are a function of social norm. Rewards, gain in reputation and pride are 'subsidy' where as shame, gossip and loss of reputation are type of 'social tax' (Schmidheiny 1992). Two important defining elements for norms are occupation and geography (McAdams 1996). In approving and disapproving enforcers use their sense of justice which may or may not be dependable in pre existing norms. Most new norm scholars believe that the norms are grounded in the concept of property, in having the understanding of right and wrong actions (Mitchell 1999). When people see norm violation being sanctioned publicly they learn as child to internalize and behave accordingly (Cooter 1996). When norms are internalized by an individual they are reflected in their behaviour, as if they are inherent, which remains unexplained (Cooter 2000). Once an enforcer sanctions a particular attitude or behaviour, the violator accepts sanctioning as a rule. This norm can be taken as norm, guiding future behaviour (Posner 1996).

Fear of being sanctioned, forces an actor to abide with norms. One important question remains unanswered is, what forces gossip to judge behaviour unacceptable and what do they gain by punishing a person engaged in such behaviour? People have propensity to gossip. They enjoy passing information to people they know. Gossip like other forms of communication is consumption good (Merry 1984). Norms arise from the internalization of accepted standard of behaviour (Cooter 1995). When a person internalizes a norm he pays psychic cost like guilt and shame when behaves against that norm. Those who internalize a norm willingly bear a moderate cost of enforcement against another (Cooter 1996). Norms get hone by gossiping like the way law gets hone by judicial decision making and consumer complains refine firms (Mc Adams 1996).

Neo-classicist like Stigler and Becker (1977) presume that preferences are given and fixed. Similarly, norms are given rather chosen (Sunstein 1996). Ellickson (1998) indicates the limitation of rational actor model asking how people come to hold preferences. One of the possible answers is that internalization of norms changes preferences and alters behaviour (Cooter 1995). This leads to the another enigma of economic theory which is not able to explain internalization (Etzioni 2000).

Sociologist claims, internalization of norms leads an individual to obey a norm with a self administered feeling and disobeys with a feeling of guilt (Ellickson 1998). Socioeconomics on the other side presume that predisposition and preferences are formed partly by social norms and are likely to change as social norms change (Etzioni 2000).

Internalization is an essential element of socialization which regulates the behaviour of a person under temptation in the absence of external sanctioning bodies (Kohlberg 1968). The internalization of norms excites a sense of responsibility to act responsibly with a social tax of guilt. Internalization is a remarkable process through which imposed obligation becomes desire (Etzioni 2000).

Mc Adams (1997) generalizes that desire for esteem gives birth to norms. The desire for esteem produces cost and benefit. A norm will arise if the benefit from esteem exceeds the cost of achieving esteem, similarly higher cost of esteem than benefit will result in consequent norm. A success which comes with difficulty is celebrated more than an easy victory. Ellickson (1991) hypothesised that *in a close knit, members of the group develop and maintain equilibrium-selection norms that will conjoin to produce maximum aggregate payoff*. In simple language it means, a group in which people know each other very well, among whom the information about anyone is easily available, where people have been more than acquaintances since years and likely to interact substantial future time, develop certain informal rules known as norms to enable maximum cooperation for the welfare of whole society.

Rational norms are a function of time and arise out of experience (Axelrod 1984). The sources of norms are remote in time. They pass from one generation to another deriving authority by virtue of being a part of tradition rather reflecting deliberation (Etzioni 2000). Norms that govern behaviour are transmitted from generation to generation, accepted and legitimized on the bulwark of traditions, superstitions, nationalism and taboos etc. Ellickson (1991) wrote about Anglo-American whaling norms, one of the well documented norms. In his words “Anglo-American Whaling norm seems to have emerged spontaneously over time, not from decrees handed down either organizational or governmental authorities. In fact Whalers norm not only did not mimic law; they created law”.

Norms come into being, stay and decline because of their inability to remain efficient to serve the purpose for which it arose. Coleman (1990) wrote that norms have efficiency related problem. As information gathering is costly, transaction relies on the previous contractual transaction. Publicly people endorse existing norms even if they don't approve personally, to claim share in common wealth and hence internalize it. Posner (2000) claims, social norms might not exist if complete information is available to every one. The probability of a norm being criticized is more when individual value the change in the norm more than sanctioning. Public criticism of a norm is a public good (McAdams 1996). Cooter (1996) defends norm to be a public good as shame is externally generated whereas guilt is internally generated. Individuals compelled by externally generated shame will disavow socially imposed cost of the norm and will make an effort to change it. Whereas individual compelled by internally generated guilt will blame him and pursue to rectify his conduct.

McAdams (1996) points, an appeal for repealing a norm is generally claimed by members who benefit most from it to prove their staunchness to the welfare of a group. A member criticizes to repeal a norm towards his benefit and the group as a whole will be taken insincere. Hence criticism of those who gain less from norm repeal will be persuaded. Overtime realization comes that certain modification in conventional tradition brings efficiency leading the approval of new rules, as more people starts acknowledging its efficiency. In the same way members of a group have an incentive to acknowledge rules and punish violators till the time they realise that an

additional condition is required to reduce the number of violators leading to efficiency. Norms are enforced through sanctions, especially by means of shunning which cost the third party very little and the sanctioned too much (Hardin 2000). A norm get weak if left unsanctioned by enforcing endogenous group.

The value of any norm lies in the regulation of behaviours of everyone, including the potential entrants and its ability to invoke the third party for the purpose of sanctioning violators (Posner 1996). Posner consider norms to be fuzzy in nature as it is difficult to predict the life of a norm for its contingency. As new norms come, old norms gradually get replaced and forgotten. One can expect the advent of future norms which are dependent on social changes, economic changes, political changes and technical innovations.

Section 2: Norms and Laws

It is a common belief that social norms and laws both serve as the corner stone of social order. A burden on law enforcer is reduced by social norms. Laws based on social norms are likely to be more acknowledged and widely enforceable (Etzioni 2000). Norms are not enacted and enforced like statues but they resemble more closely to common law doctrines. Judges give judgement at par with earlier decisions while norms producers are more likely to do with their sense of moral justice (Posner 1996).

Laws are made by legislators who enact bills which are interpreted and approved by judges (Cooter and Ulen 1994). A statue is created with cooperation of small number of politician who has a good contact with each other to create opportunities to form institutional mechanism to channel information and coordination among legislature. Common law doctrines are result of cooperation of large number of judges over long time who communicates indirectly through their opinion. The norms are by the cooperation of large number of people who are sensitive to accumulate their conduct and response in return (Posner 1996).

When a law is enacted by a legislature it affects every one in their purview. A voter is not directly related to the formation of statute. Similarly doctrines which are created by judges affect everyone in its purview. Citizens do not have direct hand in judicial opinion. In comparison to statutes and doctrines, norms are created with the participation of everyone getting affected through approval with rewards, and disapproval with sanctioning. Legal rules are formal in nature but not so are the norms (McAdams 1996).

Similar to the “Law of Nature” parliament adopts and codify the prevalent customs. Social norms emerge gradually through directed behaviour. These directed behaviour result in repeated actions which ossify into custom and finally into a social norm. The origins of many norms disappear in the mist of distant history (Basu 1998). Similarly the roots of natural law are difficult to be traced. The origin of many positive laws lies in the stratification of norms of a society.

According to Posner (1996) a rule is efficient if it maximizes social benefit when (i) chosen by rational actors who are suppose to behave in a way that leads to the maximization of social wealth (the choice test) (ii) It is not superseded by other competing rules (evolutionary test) (iii) If it is in accordance with economically efficient behaviour (the behavioural test).

Most economist favouring public choice believes statutes to be in efficient. As utility maximizing legislators favours those parties who assure his re election failing the choice test (Farber and Frickey 1991). Statues even fail evolutionary test because the legislature choice model garner legislature self interest. The statues does not solve market failure, instead transfer wealth and power to certain industries by regulating competition from potential entrants, hence fails the behavioural test (Posner 1996).

Some economists argue that common law doctrines are efficient as judges enjoy more freedom than legislatures and choose efficiency as their standard of decision. This assumption is not supported by any contemporary model and outcome of choice test is doubted (Posner 1996). An evolutionary argument about common law states that efficient rules survive over time whereas inefficient rules are made to fade out of repeated litigation (Goodman 1978). A difficulty arising with this principal is

that party who benefit more from inefficient rule will litigate on efficient rules. Most economists believe that the efficient legal system will define conforming voluntary arguments and ensure property rights against the interference of third parties. Hence are consistent with a model of efficient behaviour (Posner 1992, Posner 1996).

Norms have efficiency related aspect (Coleman 1990). Honesty promotes efficiency by allowing people to depend on the commitments of others, protecting themselves from opportunistic behaviour at the same time escape gathering private information. However in a close knit group norms are claimed to be efficient where members are equally endowed and well informed (Ellickson 1991). Unlike legislature and judges in the choice test members of a close knit community internalize the cost of in efficient rules they adopt. Hence they choose the norms that maximize the joint welfare (Posner 1996). The important thing to be noted is, the norms in a close knit group are not chosen but they evolve over time. In comparison to common law doctrine norms are more difficult to be described and identified and come into being after much criticism and bargaining. The criticism and bargaining around norms may not be as explicit as rule of law but tacitly they pass the evolutionary test. Norm producers have no institutional mechanism to prevent free riding in the aggregation of information and the enforcement of sanctions as the actors are not specialized. Legislature and court can be expected to use information more efficiently in formulating statutes and common law through their institutional mechanism of gathering information and decision making (Posner 1996). Hence statutes and common law are superior, clearer and more stable than norms.

Posner (1997) compliments that law complements as well as substitute norms Contracts depending on specific and idiosyncratic activities are made by centralized legal authority that may lack sufficient information to regulate. The legal enforcement of such contracts complements rather create norms which makes adhere possible even when there is no feasible means of legal enforcement. Contrary to this both positive and normative perspectives of norms have their limits and law has its place (Ellickson 1991). Ellickson from his observation in Shasta country understood that disputants are increasingly likely to turn to legal rules when social distance between them increases, when the magnitude of what is at stake rises and the legal system provides an opportunity for the disputants to externalize cost to third parties.

Section 3: Norm and Game Theory

Game Theory enables us to analyze human behaviours when it comes to cooperation. Game theory is based on rational actor model, which assumes that an individual pursues their self interested goals and individually choose appropriate means from available means to achieve their interests (Ellickson 1991). The theory explains that under highly restricted condition, cooperative behaviour evolves and sustains over time where players care a lot about future payoff, limited by their limited choice (Posner 1996). In spite of assuming rational actor model to be ruthlessly selfish, in a close knit society norms guided behaviours have moral forces bounded by emotions which lack justification in game theory (Cooter 1993). The best of game theory model explains convincingly game involving two players.

When cooperation takes between two parties in the absence of third parties enforcers the cooperation is always analyzed as “Coordination Game” whereas in the presence of multi party enforcers it is analyzed as “Prisoners Dilemma”. A standard version of coordination game consists of two players, where each player has to choose from two different moves. They do better if they choose to make the same move than making different moves. The important point is that if both the party are aware of the convention they have an incentive to abide with it to maximize their gains (Posner 1996). Coordination norms favourably evolve in communities like close knit society in which actors have repeated contacts with each other. Posner explains that norms that prevail will be the one by luck which most actors initially follow.

Whenever sanctioning of behaviour arises, prisoners’ dilemma marks its presence (Posner 1996). The game of prisoner dilemma according to Ellickson (1991) must satisfy three conditions. First, the dominant strategy for each of the player should be defection. Second, defection should reduce individual payoff for players in comparison to players who has irrationally chosen cooperation. Third and last, mutual cooperation should produce the maximum total payoff. A player in prisoner dilemma does better by cheating if others cooperate and every player benefits by cheating everyone else cheats. The private incentive or short-sightedness of players allures them to cheat but every one would cooperate. Posner (1996) opine that gossip overcomes prisoner dilemma as it affects on the margin showing that norms will be

produced on incomplete information and it will vary a lot because of herd behaviour. However anything for example blackmail which impedes the internalization of norms and undermines communication leaves the norm unrefined (McAdams 1996).

The extent to which a norm has been internalized is determined by its stability. Cooter (1996) defended that when enough people have internalized to enforce it, it becomes stable. People who internalize norms increase the equilibrium level not necessarily by obeying the norm themselves but punishing others who violate them.

Section 4: Classification of Norms

It's the difficulty in recognizing and understanding norms which impede the classification of norms. Scholars of law and society, sociology, law, political science, and law and economics have tried to classify norms in different ways. Basu (1998) describes three Social Norms: Rationality Limiting Norms, Preference Changing Norms and Equilibrium Selection Norms.

A norm which stops us from doing certain acts or selecting particular matter how beneficial it may be, are called rationality limiting norms. If people are standing in a long queue to buy movie ticket, most of them will have an urge to break the line and reach the counter. Still most of them will endure patiently not because they are incapable of doing it but most of them consider it a wrong conduct.

When certain behaviour is guided by norms of religion or culture they become habit. Slowly these habits are internalized and those acts are accepted as the preferred etiquette. Basu (1998) reasoned it to be the cause of systematic variation in taste across region and nations. Such acts which started because of norms change into preferences in due course of time. These types of norms are referred as preference changing norms.

apply means to reduce transaction cost by clearly defining the property rights. Community disapproval is one of the most common features which increases transaction cost. State can structure bargaining in such a way that makes the violation of norms unnoticed. Finally he states that if bargaining around a norm is not itself a violation of norm then encouraging bargaining does not injure third party except the envious.

Section 5: Norms and Common Property Resource

Most authors who have written about common property resource have described about informal means of control of common property. In some places government intervention has helped in controlling the over exploitation where as on other places it has caused over exploitation. Posner (1996) claimed that common pools are governed by efficient norms under given condition. First, only a close knit group has access to a common pool. Second, state enforces underlying property rights. And third, endowments are relatively equal.

Ostrom (1990) from her observation concluded that communities that are capable of managing common pool such as community forests have substantial level of cooperation. These people develop norms for regulating community forests. Traditionally these societies have developed means to use community forests to the extent that ensures replenishment even under moderate shift in climatic condition. Still community forests are vulnerable to certain negative externalities as stated by Posner (1996). First, communal regulation of community forests is vulnerable to sudden change in environment. For e.g. discovery of chain saw brought a revolution in timber industry.

Second, when a community forest is managed by community it is over exploited by the opportunistic behaviour of the strong. Ostracism is a common mean of sanctioning. It is difficult for poor to survive when ostracized but not difficult for strong and rich (Posner 1997). Third, envy, resentment and morality especially traditionalism could play a role in the management of community forests. Moral arguments to a great deal favours inefficient norms and deter welfare maximizing behaviour. Envy results in more inefficient norms than morality. It motivates people to resist change even if the change would increase total wealth, for they don't have what others have.

To overcome these problems Posner (1996) suggests that government takes several steps. First, government impose there own rules in the form of laws that give incentive to violate inefficient norms. This can be achieved by issuing license or regulating harvest and prices (Ostrom 1994).

Second, government can bring changes by allowing norm transformation by giving certain level of autonomy while influencing them in subtle way through providing relevant information about forest resource to the group.

Third, creating trade able property rights in a community forest. When property rights become trade able there can be bargaining to the extent that efficiently allocates the property entitlements (Coase 1960). For efficient bargaining transaction cost should be reduced by enforcing contracts and choosing efficient default rules (Posner 1996). Law does not transfer entitlement but it clarifies and confirms entitlement, hence facilitates voluntary transfer of more valued use (Cooter and Ulen 1994).

CHAPTER 3

Field Work Report

The empirical information mentioned in this chapter is the out come of field work spread over month of May and June. The weather during the season becomes promising with the rise of temperature and repeated interruption of pre monsoon showers. As a compulsion the season becomes festive preparing the forest to bear new leaves and ample amount of fruits to provide for its appreciators. In the month of May the average maximum temperature is 38 ° C with an average rainfall of 48.5 mm where as during June average maximum temperature is 34 ° C with rain fall of 104.3 mm on an average (data taken from Damodar Valley Corporation (D.V.C), Hazaribag). The period was deliberately chosen soon after Sarhul Pooja as the forest dwellers goes on collecting varieties of non wood forest produce (NWFP's) for domestic and commercial purpose exposing their entitlements on the forest. It's the season when Mahua flowers and fruits are collected.

Mahua flower is used for eating and feeding cattle. It is also used in making Liquor. The seed of Mahua is used for oil extraction and used in rural Jharkhand as a substitute of mustard and coconut oil. During this season Sal bear fruits called Sarai, is used in the manufacture of soaps and detergents and hence collected purely for commercial purpose. Fresh Sal leaves are collected for making plates for commercial purpose. Kendu leaf used in the preparation of Biri (similar to cigar but comparatively smaller in size) is collected for purely industrial purpose. Other important NWFP's collected in this season are Koinar (*Bhauhinia Purpureal*) leaves, Jamun (*Syzygium Cumini*), Imli (*Jamarindus Indica*) fruit, Gular (*Ficus Religiosa*) fruit, Khajur (*Phoenix Acaulis*) fruit etc. apart from lot of shrubs, herbs and grass.

The field work was confined in two districts of Jharkhand (i) Hazaribag and (ii) Chatra. In Hazaribag selective villages of seven blocks were covered and villages from three blocks of Chatra were visited. As per division wise details of forest area in Jharkhand, Hazaribag West Division, Hazaribag East Division and Chatra South Division were sieved. The districts chosen have features of modern Jharkhand as well as features of traditional Jharkhand. The village selected were irrespective of the social and cultural difference as in most of these villages people of different caste and religion live in different pockets locally known as *Tolas*. Several of such villages constitute a *Panchayat*, a politically decentralized institutions to resolve village level minor disputes to reduce the pressure on judiciary and other law enforcing agencies. In Panchayats the disputes are resolved on the basis of village's creed of customs, traditions and norms. The Panchyats comes under a Block and several Blocks constitute a District.

In similar vein to decentralize the claims on forest, Government of India has enacted in January the formation of Gram Sabha which is convened by a Panchayat. The Gram Sabha elects a committee of ranging between 10 to 15 people as a member of Forest Rights Committee, having one third members of schedule tribe with adequate representation of women mentioned. The forest rights committee decides the claimant and their rights. Gram Sabha comes under Sub-Divisional Level Committee following the hierarchy of District Level Committee and State Level Monitoring Committee in ascending order.

The first ever such need was realized in the National Forest Policy of 1988 but was withholding little space for involvement of local people because of its top down structure. Soon after the formation of Jharkhand in 2000, The Department of Forest and Environment under Government of Jharkhand took the step to decentralize certain decision making and management of forests in the hands of local villagers with the formation of Van Samiti (Forest Committee) and Eco Vikas Samiti (Ecological Development Committee). Later these two committees merged into Forest Development Agency (FDA).

Section 1: History of the Field Work Area

The district of Hazaribag in the early times was covered with dense inaccessible forest. The inhabitants of the area mostly tribal successfully resisted the arrival of Aryans many times. Jharkhand which means forest territory remained untouched by Hindu influence in ancient times. The territory remained free even through Turko-Afgan period till 1526. With coming of Akbar at Delhi throne in 1556 the Muslim influence started influencing Jharkhand. Shahbaj Khan a commander of Akbar came to Jharkhand in 1585 to make the Raja of Chotanagpur subordinate to Delhi Throne. The death of Akbar in 1605 gave an opportunity to the region to struggle for independence. However Ibrahim Khan Fateh Jang then the Governor of Bihar defeated and captured Durjan Sal the 46th Raja of Chotanagpur. He remained in prison for twelve years and was released and given back his province for demonstrating the capability of identifying diamonds.

Chotanagpur was given to the Governor of Patna in 1632 for yearly payment of Rs. 136000 which was further raised to Rs. 161000 in 1636. Sarbaland Khan then Governor of Bihar during the reign of Muhammad Shah (1719-1748) obtained the submission of Raja of Chotanagpur. In 1731 Fakhruddoula the governor of Bihar came in terms with the Raja of Chotanagpur. The Raja of Ramgarh was reluctant to pay the annual amount of Rs. 12000 as fixed with Fakhruddoula. The condition of reluctance prevailed till British occupied the territory. Under Mughals the main estates in district were Ramgarh, Kunda, Chai and Kharadia.

Hazaribag was not affected much during Kol uprising in 1831 but changed the administrative structure of the territory. The South Western Frontier Agency embraced Ramgarh, Kharadiha, Kendi and Kund under the administrative headquarter of the division named Hazaribag. During 1854 South Western Frontier Agency was renamed Chaotanagpur as a non regulation province under Lieutenant Governor of Bihar. In 1855-56 revolt against the British, Santhals of the region participated but were suppressed. The district of Hazaribag after the census of 1991 got divided into Hazaribag, Chatra and Koderma. The District of Ramgarh got separated from district of Hazaribag in 2007. At present the District of Hazaribag comprise two sub divisions and twelve blocks. Where as the district of Chatra comprise one sub division, ten

development blocks, 125 Panchayats and 1479 Revenue villages. The information in this section has been taken from reports of district administration of Hazaribag District and Chatra District. Both the districts are badly affected by extremist activities. The extremist believe to be fighting on behalf of rural poor and landless and want to establish communist state. Jharkhand's forest and mineral resources and related industries provide an almost limitless source of extorted revenues to the extremist groups.

Section 2: Forest Type

The type of forest found in and around Hazaribag and Chatra can be classified in two categories. The type of forest mentioned in this section has been incorporated from the works of Sanjay Kumar (2004), and Anupam (2002).

1. Sal Forest: - It comprises Northern Dry Sal forest of 5B/C-1 type. The majority of the forest comes under this classification. The forest is coppice forest of quality B but there are patches of quality A in several felling series whose density at many patches are of absolute 1. The species of the top and the middle stories are Shorea Robusta, Terminalia Tomentosa, Madhuca Indica, Pterocarpus Marsupium, Adina Cardifolia with occasional bamboo breaks. Hollarhea Antidysentrica, Indigofera Pulchella, Carissa Opaca etc. are the common shrubs. The grasses comprise Heteropogon Controtus, Eulaipsis Binata. The climbers consist of Bahunia Vahlilii, Acacia Pinnata and few Asclepiadacene.

2. Miscellaneous Forest: - It embraces Northern Dry Mix Deciduous forest 5B/C-2. These are found in the hilly slopes and top consisting relatively poor soil and moisture. The trees making the top story are Boswellia Serrata, Anogeissus Latifolia, Pterocarpus Marscupium etc. The middle stories comprise extensive bamboo. The shrubs are Nyctanthe Arbotrite, Zizphus etc. Climbers are relatively less with light ground cover.

Section 3: Field Work Methodology

The aim of my field work was to examine the practical and socio-cultural importance of the forest to the local people in order to identify existing entitlements and norms. To achieve this goal I adopted Participant Observation as a dominant strategy to gain a close and intimate familiarity with the villagers. Through intensive involvement with the people in the natural environment their practises were noted.

The credit of participant Observation goes to Frank Hamilton Cushing who worked on Zuni Indians in the last half of nineteenth century. The trend was followed by Bronislaw Malinowski, Edward Evans-Pritchard and Margaret Mead in their study of non western societies in the first half of twentieth century. The root of participant observation can be traced in anthropology where it emerged as principal approach to ethnographic research. As a rule of thumb to learn about culture one has to conceive a personal relationship with local informants to observe better while observing and being a part of the group while participating.

Participant observation involves a wide range of methods important of which are informal interviews, direct observations, participation in the life of the group, collective discussion, analysis of personal documents produced within the group, self analysis and life histories. To a great extent the methods have characteristics of qualitative research but the quantitative dimension in it cannot be ignored. Time is an important factor and practitioners have undertaken an extended period of time ranging from several months to several years. Identifying entitlements and understanding norms demands ample amount of time to be recognized. When observation and interaction extends over sufficient period of time, a researcher can note anomalies between what participants says and does, their belief of what is happening and what should happen, their reason for what they do and what they should do.

An important part of my field work involves traveling into forest with local people, meeting members of Van Samiti, conducting interviews of forest officers, members and non-members of Van Samiti. In some of the village I was lucky to initiate group discussions giving space for every one to participate in it. I have spend a great amount of time in many families I visited, enjoyed their hospitality observing

their daily routine, inquiring their beliefs, investigating their requirements and the means they use to achieve it.

Section 4: Field Work

Driving down a road is a wonderful experience for every one especially with a good company. When we drive a car or a motor bike our observation is different from when we drive a bicycle on the same road. The previous two experiences are totally different when we walk down a road as the observation gets drastically different. To start with a scratch is interesting but where to put the first scratch is a matter much similar to gambling. I put this first scratch in a small village named Chal Chalaiya in Hazaribag Sadar Block where I spend a day and a night with one Oraon family who offered me to drink mahua, eat mahua and sleep under a mahua tree. Before visiting this village I heard a lot from the residents of the village who adorn the beauty of their forest and took the privilege of some pride.

Chal Chalaiya is a small village with eleven families. Every house is lucky to have a government job. The villagers are mostly dependent on agriculture which is further dependent on rainfall. One of the old man Mr. Jodhi Oraon recalls those days when they had a lot of water problem for daily requirements, the time when they had to bring water from the nearby stream which takes about half an hour on foot to reach there. A young man named Suresh in his twenties knows his responsibility to protect the village forest but could not defend the reason for doing so. The villagers claim that they started the Village Forest Committee with their own initiative to protect their forest. The old man Jodhi Oraon acknowledged Khattiyani Part II (Khattiyani is a document in which land holdings are registered) and spoke of his village rights on their forest as well as the lesser rights of neighboring village on their forest. He claimed that only the members of his village can bring wood from their forest to fulfil their domestic and agricultural needs.

The outsiders to the village are only allowed to take fuel wood for cooking without damaging the trees. The non wood forest products (NWFP) are collected for domestic purpose and much of commercial value is left in lack of market and less repayment. The cattle of the region are luckier than human beings who can go and graze in the forest of their choice. Suresh and his uncle said that earlier every day two youths from the village use to go to the forest for guarding. If any outsider found guilty of cutting trees were made to hold ears and do sit-ups by holding their ears for ten to twenty times in front of the whole village with an additional fine amounting to Rs. 150 to Rs. 200. If the local villagers need wood they have to ask permission from the committee. All these were going fine till the forest department did plantation in the village land where they use to practise agriculture. They claim that they are still paying the tax for that land. After this dispute with forest department, people got demoralised and now protect the forest half heartedly. Still, Jodhi Oraon claiming of six cases pending with forest department looks normalized with the incentives provided by the forest department in the form a pond and a well for the village. Suresh understand that it's an offence to lead the cattle in the plantation area. Suresh said that they do not face any trouble because of C. P. I. Maoist Extremist and have taken several training by the agencies of government not to join the extremist group. He took me to several places where previous encounters and explosion took place.

On my search I went a nearing village named Gurhet, a village much larger than my previous village. I asked the villagers whether any Van Samiti has been formed in that village. They told me about a man who is the Adhyaksh (President) of the Van Samiti functioning in that village. I went looking for him to his house where I met a woman of his family who informed me of him being present in a site where pond was being renovated. As I reached there I requested him to share some of his valuable time with me. Soon I was surrounded by twenty men of that village as they were also interested in what I was there for.

The Adhyaksh was also working as a guard in the nearby area where the forest department has done plantation. He was being paid Rs. 76 a day excluding Sundays. He was also supervising the renovation of pond, financed by the forest department. There were twenty one members in the Van Samiti of which two third were women. The people surrounding me claimed that they need forest for fuel wood and fodder for



Figure 3.1 A plantation site in Gurhet village

Figure 3.2 Pota's of Kendu leaves collected and being dried in Babu Ballia village



cattle. Their other requirements were wood for domestic requirements and agriculture. The main source of subsistence in the village is agriculture in association with the labour sold in the town. I asked the adhyaksh that why is he doing all these when the town is nearby and he can earn more by working there. He replied, I want to do social work and improve the condition of the village. He said I am protecting the forest because it is good for the environment as it gives fresh air and brings rainfall.

The villagers patronized that the forests are the property of Government and it's their duty to save it. They vowed that even if the government will not support them they will protect the forest for the goodness that it provides. The Adhyaksh dictated, if a poor and needy needs wood from the forest then the committee permits them to bring the wood but was interrupted by a fellow who said that it's not true. However he was consoled by the adhyaksh to discuss these issues later in my absence. The defaulters who are found cutting trees are made to pay fine upto Rs. 200 but no strict action is taken by the villagers as everyone belongs to the same village and they want to live in harmony. The men in their sixties were aware of the village forest and their rights mentioned in khatiyani part II and showed me their forest of about 750 acres.

In this village, villagers seemed to be less interested in the non wood forest products (NWFP) and those who gather, gather for domestic purpose as the collection of NWFP is arduous. One of the wise people present in the group confessed and requested me to request the Conservator of Forest (CF) to bring back the Coope system. In Coope System the forest department use to demarcate a forest area and trees were felled by private contractors under the supervision of forest department. The valuable woods were taken by the contractors and the left over was for the need of villagers to fulfil their fuel wood requirement. He said that there is difference in what we say and what we practice, we do steal wood from the forest and in a rush to do it safely without getting noticed we have destroyed the nearby forest ourselves and far away forests are being stolen away by outsiders. If coope system will be re-established much of the forest could be saved from being destroyed, the rest seemed to agree. These villagers were the first to inform me about four dead bodies lying in the woods of Ichak, where no government agencies had reached so far.

Barka Gaon is one of the blocks in Hazaribag, in several of its village I had been through. In this region I witnessed the comparative pressure over a resource system. Recently Coal has been found in this place and it has reduced pressure on the forest to a great extent. Presently Oil and Natural Gas Corporation (ONGC) is mining gas. As one reaches Barka Gaon from Hazaribag Sadar a thing which cannot be unnoticed is the knocked down office of National Thermal Power Corporation (NTPC). This is said to be knocked down by the local people in an opposition to unjust compensation of land taken by the NTPC. At present none of the mines are open and the representatives of democracy has allowed bringing coal in bicycle and bull carts. Previously only bringing over head was allowed. Many believe that ban on illegal mining and selling will increase the robbery in the connecting roads. The illegal suppliers of coal set out early in the morning towards nearing towns dragging large sacks of coal. Praveen Wesley a member of Navbharat Jagriti Kendra (an NGO) said that these suppliers work for few years like this before they are attacked by tuberculosis resulting from over exertion of muscle power in lack of nutritious food supply.

In Chandol village I went to meet the Adhyask Asheswar Ram. To my surprise on his behalf his elder brother Pancheswar Ram came to meet me who verified my identity card before talking. He said that there are around about twenty five members in the Van samiti of the village. He spelled out his grudges on forest department and the government complaining the foresters used to come to their village about twenty years back. If a person lives in two dismil (a local land unit) of forest land his house is knocked down but the government has given so much of forest land to NTPC, he grumbled. These days access to forest is difficult because of extremist activities. Lalu Rajwar a member of the samiti accepted the distribution of the solar lamp by the forest department. They reported, in early nineties the first such forest committee was formed for Kendu leaves. The main source of income apart from agriculture is working in rock mines and coal mines as well as selling stolen coals.



Figure 3.3 Children breaking Dori in a school Building

Figure 3.4 Daulat Mahato, Mukhiya of Chatro Village. Second from left.



Kunda village is adjacent to Chandol village. I tried to meet the Adhyaksh of Van Samiti of this village but could not find him in the limited time but thanks to the enthusiastic villagers, women and men from child to adult to most senior of the village arranged a chair for me and gathered around me. They said we need forest for cattle grazing as most of the houses have shifted to coal to cook their food but to ignite coal they need wood. The ladies said these days their visit to the forest for collection of fuel wood have greatly been reduced and in many families the richer ones asks the poor to collect the wood on their behalf and get paid in return. There are twenty four members in the newly found Van Smiti, seven of whom are ladies. They were aware of their Katiyan forest.

When I asked to whom does the forest belong they said the forest belongs to Sarkar. They were unsatisfied with the coope system as it allowed them to collect fuel wood for the year in a limited period of time. Is forest being protected these days because of the presence of extremist in the woods I asked? No, was the reply from the crowd and every one seemed satisfied with the answer. However they accepted that the committee is working slowly in the lack of incentive and were unsatisfied with the solar lamps provided by the forest department. If money will be paid to the members of the committee it will work with commitment. The village committee decides for the legitimate need of wood other than the fuel wood and the breaches are fined.

For three years Van Samiti in Babu Ballia village is active. The new committee was formed for fifteen days at the time of my visit through direct voting. Ram Kumar Verma, adhyaksh of the samiti reported the presence of fifteen members in his committee assuring the presence of one third of its member to be female. The village is dependent on both coal and wood for cooking purpose. In almost every house hold the cattle goes to the forest for grazing. The non wood forest products are gathered here for domestic purpose. Earlier they were collecting Sarai (Sal fruit) which is used for industrial purpose in the production of soap and detergents. I saw the women of the village being engaged in the collection of Kendu leaves used in biri. This work is done once in year in the month of May and June before the advent of monsoon.

Earlier forest department use to purchase but these days the department leases out the forest area in auction. The one who is ready to pay the highest takes it and appoints a local manager know as munshi. The ladies in the village set out early in the morning to the forest and bring leaves to the munshi in small bundles know as pota. There are fifty two leaves in one bundle. Thousand of such bundles are packed in each sack. The women in the village get Rs. 50. for hundred such potas. The munshi told me that the collection of Sarai is not so actively done like Kendu leaves but people do bring Sarai and sell it if the purchaser comes from town at the rate of Rs. 20 a kilogram. To my own observation I never saw huge piles of Sarai. Not only in this village but in others also I saw people having only few kilogram of Sarai.

On my way back the same day from the Barka Gaon I rushed into the Barka Gaon Range Office, not to find any one except an office staff working on daily wage. He recollects it was 1983 when last recruitment for fourth and third grade took place. He complained that there are four beats which should have a Forester in each, the beat consists of several sub beats needing a forest guard but the present working strength is less than half of what is required. In our range we face the problem of illegal mining of coal and minerals in the forest land, once we caught a tractor loaded with illegal coal around midnight. Soon the message spread around the villages like fire and the office was attacked by a crowd of mob mentality in which the ranger was attacked by a sharp weapon right in his throat he continued. Another problem according to him is of cattle trespass in the plantation area.

On second visit to Barka Gaon on the second day I came to know that last day I had escape robbery for fifteen minutes on my way in the valley at 10' o clock in the day. The M. L. A. Mr. Teaklal Mahato of Barka Gaon dilates the forest can only be saved with ample awareness among the people backed by proper education and abstinence from alcohol. He ridiculed forest department to be a dead department and as a result today we don't have mature forest. I asked him, one day these mines of coals are going to be opened up by the Central Government leading to the retreat of pressure on forest, any possible solution you suggest? Yes the mines have to be opened up one day, he replied and then there was a silence.



Figure 3.5 A view of mature Sal Forest in Hazaribag

Figure 3.6 Wood being carried in Bull Cart, in Ahari village.



Following the common thread of Van Samiti I reached Prevatari village having around thirty five families. I started talking to a young man who informed me about the distribution of solar lamp by forest department in his village to the relatives of the adhyaksh on the payment of Rs. 600. What animals are present in the forest, I questioned him. Appreciating the taste of porcupine he appreciated the presence of porcupine, rabbit, wild boar and bear. We have less forest in this area and what ever is remaining is due to effort of forest department and of the people and not because of the Van Samiti, he proclaimed. He appreciated the dense forest in the regions dominated by the manjhis (a schedule tribe) as they never allow any one to destroy their forest, they manage it and sell timber for the money.

In search of adhyaksh, I went to many houses but could not find him but a hot spring overflowing a tube well. In many houses I saw people making beautiful baskets and other household products of bamboo. In spite of living adjacent to the forest they had to buy bamboos from the private suppliers at the rate of Rs. 10 each. Two such bamboos are required to prepare a basket of average size with a labour of two days. These baskets are sold at a rate of Rs. 80 each, with more or less bargaining. We don't get bamboos from the forest because the people in and around this village are greedy, whatever new shoots sprouting during rainy season are all mercilessly cut and sold in the market because of its taste and demand, they said. In this village the forest department has planted cashew nut plants leaving a confusion, who will be the potential harvester? The NWFP are mostly gathered for domestic purpose but if surplus, then is supplied to the local markets. Many NWFP's like Kendu leaf and Sarai are not collected here in the absence of munsies and potential buyers.

The Van Samiti in Kundru village was dormantly active since a decade. The renewed committee has more than twenty members in which about more than ten female has made a way through direct voting with aegis of forest department. It's a village dominated by schedule tribe and schedule caste. During my visit the adhyaksh of the committee had gone to range office to meet the ranger. In his absence I got besieged by the committee members and other villagers with hope in their eyes that some one from the government has come to acknowledge them. They were aware of the Khatiyani forest of the village. Is there any one who stops you from bringing wood

from forest, I asked? We are free to bring wood for domestic and agriculture purpose, every one knows and understand each others legitimate requirement of wood, we are not blind and we trust each other they continued. The cattle go to the forest for grazing and they don't stop outsiders to collect fuel wood from their forest. When the men go out of the village to work, whole village take the responsibility to protect forest. In spite of this they regret to disclose that they are unable to prevent the theft of valuable wood from their forest because of fear of threats from outsiders. When they catch anyone stealing wood or carrying wood they call the forest department for help but no help comes either from the forest department or the police department, only the consoling answer on phone that at present there is no one in the office to come. NWFP's with domestic utility are collected for domestic purpose or to be sold in local market. The forest produce of industrial value are left in the absence of market.

To interact with Birhor tribe I went to a tola of Satwahiya village where they are residing in a small pocket of forty four concrete houses constructed in 2003-2004 under Birsa Awasya Yojana. The men of this community earn money by working as a labour in the nearby mines or under local constructors. When I visited few men could be seen and the group as a whole was reluctant to talk to me. I could see women weaving ropes from synthetic fibres drawn out from cement sacks instead of natural fibres to fulfil the local market demands. This was the only village in which none of the women spoke to me. The males accepted that they bring only fuel wood and nothing from the forest. They even denied that they bring NWFP's from the forest which they are generally seen selling in the local markets. I could see suspicion in their eyes. One of the men who dared to speak said that the Van Samiti of the village is only for the powerful, we were asked money for the solar lamp distributed by the forest department. To the best of my knowledge these lamps were to be distributed free of cost to the scheduled tribe families. He seemed unsatisfied while saying that the forest department people have requested them to take care of the eucalyptus plantation behind their residence but we are not being paid anything for it.



Figure 3.7 Bamboo products being sold in Hazaribag daily market.

Figure 3.8 Leaf plates being sold in Hazaribag daily market.



Another tribal village named Bartuwa have approximately seventy houses of almost equal number of Santhal and Oraon families and few schedule caste family. I went looking for the adhyaksh and sachev (secretary) of the Van Samiti but could not locate them. I interacted with few women sitting outside their home and breaking dry Karanj (*Pongamia Pinnata*) fruit for its seed from which oil is produced. The oil of Karanj is of great medicinal value. These ladies were aware of the forest of their village. They informed that the adhyaksh and sachev of the committee have nominated themselves without an election. No one knows how the committee works; it's a mystery to them. Few solar lamps by forest department were distributed in their village and they pleaded if I could request the forester to consider them for that. According to them they are free to access their forest and bring any thing of their requirements, fuel wood for cooking, wood for house making and for agricultural need, NWFP's to supplement their need and if extra they sell in the local market. In this village the first committee was formed five years back when the first and last meeting was conducted to stop tractors of wood being stolen and carried away. The committee failed to check those people coming in group and threatening them with guns and muscle power and leave them as silent viewer.

The last village which I visited in Barka Gaon is Pasaria. The village is mostly dependent on agriculture and income from labour in the coal mines. Wood from forest is the main fuel for cooking. As I was addressing to the group with a note book and a pen in my hand I could hear few women whispering that I might note down every thing and arrest them on several charges. Anyway I was able to convince them that I had no such intention. The youths of the village told me that forest committee was formed in their village nearly fifteen years ago without any support from forest department. The village is protecting forest because it protects environment and brings rain. In addition to this they claimed that forest makes there living possible and if they won't protect it the outsiders will come and cut trees even from their private land. They answered me that the forest in the recent years has become dense because of their effort. If an outsider is caught stealing wood their axe is seized and is made to pay a fine of Rs. 200 to Rs. 250. The NWFP's of domestic importance is collected for home and the spare is sold in market. When they lack money they collect and sell NWFP's of commercial importance.

In Katkam Sandi Block I visited three villages for investigation. In Bendi Village I found the members of the Van Samiti in their forest. They recalled the first such committee came into being by the self effort of villagers in the year 1991-92. During that time the leadership was taken by Late Binod Dube, who breathed his last breath with the bullet fired from the extremist weapon. A man named Bisheswar Ganju and his friend showed a lot of interest in the forest and answered all my questions diligently. They, like other members of the village depend on forest for the collection of fuel wood, wood for house and agriculture. They allow outside cattle to graze in their forest but penalise the theft of wood from their forest. Somehow they consider the legitimate need of outsiders and allow them to collect fuel wood from dead trees and bushes. The new committee is in the process but till the time I visited them they had not register their forest committee in the forest office. Collections of NWFP's are done mostly for domestic purpose. The villagers are making an effort to establish a leaf plate cottage industry.

Lakhnu and Joradiha are two villages under Katkamsandi Block. Lakhnu is dominated by minorities and schedule caste people where as Joradiha is dwelled by occasionally backward caste. In both the villages forest committee was formed by the effort of villagers in late nineties. The committees in the two villages were rejuvenated in 2002 after receiving training organised by the forest department on village forest committee. The day I visited these two villages there was a tragedy in the nearby village named Juri, where a group of elephants have killed a man sleeping outside his house at night. One of the elephant of a group of seven elephants came, lifted him in trunk throwing back to the floor and finally crushed under foot.

I inquired the role extremist play in the protection of forest. The forest has grown dense in the recent years and we have few open spaces in the forest, we guard it and are the result of our effort. Md. Tausique Khan is the adhyaksh of the committee in the Lakhnu village. He is a contractor by profession and has few ponds where he practise fishery. When I went to his house he was distributing money to the labours. He offered me tea to spend time till he relieved himself from his engagements. He informed me that there are twenty one members in the present committee of which eight are females. The village needs forest because of environmental reason, fulfils domestic need apart from fuel wood and cattle grazing. He on the half of his village

said very politely if they could get little support from the forest department. In 2007 few solar lamps were distributed in the village by the forest department and in 2008 the village has received a first aid box. The committee believes that financial support from the government will make them more responsible as a committee member. In the area there is no collection of Kendu leaf, Sarai and Sal leaf, due to the absence of adequate market except Mahua for domestic use and local market.

In between my field work over Hazaribag District I turned towards Chatra District. The first block which I visited in Chatra District is Simaria. In Simaria I started working from Torar village having about hundred and twenty five houses divided in different tolas occupied by people of different caste and religion. In this village the first Van Smiti was first formed in 1992 with the effort from the forest department when it had twenty two members of which five were ladies. Recently those who have filled the form with an amount of Rs. 600 and applied for solar lamp provided by the forest department got it. In the beginning when committee came into being, villagers had to take permission from the committee for woods for domestic and agricultural purpose with an exception for fuel wood, cattle grazing and collection of NWFP's but gradually it returned to its previous state. These days wood can be brought at one's convenience without any opposition from any one. Still selling of timber in market to make profit is not tolerated by any one. The outsiders to the village are not permitted to cut trees from the Khatiyani forest of the village. Outside cattle can come and graze but the collection of fuel wood by outsiders is not accepted by every member of the village. They accepted that since last few years the forest has grown dense because of fear of extremist hideouts in the woods. When I asked to whom the forest belongs every one in the group admonished that the forest belongs to them and they are going to save it even if the government will not support them. I was questioned back on government question that who after all the government is, the one in Delhi or the one who are in woods. I kept watching all of them, was left speechless.

More than two years village forest committee is active in Sila, a village in Simeria block of Chatra. When the committee was formed in and around as one of the correspondent explains, the ranger gave Rs. 5000 to each committee. Later the committee was able to gain more than Rs. 100000 as compensation from railway department for the construction of rail road in the forest land. The people here were aware of their Khatiyani forest and used the term 'right holders' in their forest. The villagers need forest for fuel wood and cattle grazing. They don't allow outsiders to collect fuel wood from their forest but don't stop outside cattle to graze in their forest. These days there is no one to stop the residents from cutting trees and they accepted woods being taken away by villagers to the market with some adjustment with the forest department staffs. A respondent told that the villagers want to destroy the forest to turn that land into cultivable plot at the same time he regretted that no one understand the responsibility and he is unable to make them realise. The forest in the Rayyati (private land) plot is safe.

I asked about the role played by extremist in the protection of forest. A correspondent responded in anguish, Zero. The contribution of extremist in the protection of forest is zero. Extremist oppose Van Samiti and soon after its formation the adhyakshs were asked by the extremist to surrender their designation. When extremists get pleased with the people living in the forest they clear large plots in the forest and offer it for cultivation. Among NWFP's mostly Mahua is collected for domestic purpose in addition to other edible products of the forest. As far as forest department responsibilities are considered plantation has been carried out under National Rural Employment Guarantee Act (NREGA) contrary to roads, bridges and ponds demanded by the people.

Marha is a beautiful village in a deep forest surrounded by small hills. A thing, for which I will always remember it, is its dense forest. I went all around the village to find in every house Sal leaves plate being made. The villagers claimed that they save the forest for environment reason as it gives fresh air and brings rainfall. The adhyaksh of the Van Samiti, Charku Turi told me that twenty members are in the committee out of which two are ladies. Solar lamps have been distributed in this village by forest department and plantation has also been done. People there were aware of their Khatiyani forest and revealed the problem of theft by outsiders. As far

as villagers are considered no one stops them from accessing their rights in forest. For higher need of wood than the normal the committee takes the decision. Like many other villages that I visited this village doesn't have a pitch road, without any electrification. The villagers allow the outside cattle to graze and outsiders from nearing villages to collect fuel wood but cutting of wood for other purpose is not allowed.

I asked them the role of extremist in the protection of forest. They replied confidently that it's their effort. Charku acts as a munshi to the village who collects NWFP's in the village and handle it to the contractors. They revealed me that although agriculture is the main source of subsistence they are dependent on forest all the year round and they leave forest during monsoon for cultivation. From September to March they are busy in collecting Sal leaves. In April and May they collect Mahua, Sarai, Dori and Kendu leaves. Till the advent of monsoon they again collect Sal leaves. They reasoned unemployment as a reason for the destruction of forest. Nowadays there is a rule by the government that when the contractor pays the royalty for transit of a truck of Sal leaves he has to pay Rs. 500 out of which Rs. 475 has to be deposited in the account of the Van Samiti from where the truck gets filled. The problem that the village face is that it is seldom able to fill the whole truck and the award goes to the samiti where it gets filled. Every house manages to earn Rs. 200 a week by making Sal leaf plates. Sarai is collected in this village to fulfil industrial need but this year there was fewer Sarai as compared to the previous years.

When I reached Sikri Village I saw men and women engaged in their household work. I asked them, do this village have Van Samiti? They informed that they don't have a Van Samiti and there is no one to steal wood from their forest. I guessed this might be because the village is comparatively big with ten tolas and more than three hundred houses. The outsiders can come and take wood from the forest without any objects. My understanding that I had developed so far in the field gave a shock to me. I was healed there only when they clarified that there isn't much tree left in the forest. The village depends on fuel wood for cooking which they bring from others forest but are denied wood for any other purpose. Earlier they remember bringing wood from deep forest with the permission of forest office. Later this permission was to be taken from the extremist groups in the forest. These days dispute in the extremist

group has resulted in the formation of four different extremist groups leading into intra group massacre. As a result the extremist don't mingle with the villagers and hate the presence of villagers in the forest for security issue. Anyone trying to visit are brutally beaten and in extreme cases gunned down. The life has become difficult these days they said.

Driving down to start retreating I reached Simaria Range office to find Umesh Yadav and Nand Kishore Das, two forest guards who have had returned from the field were changing uniform to relax with a jar of cold water. Umesh is working on daily wage basis and Nand is a permanent employee. They welcomed me to share their suffering in duty. Nand said that he has to guard more than one thousand hectare and without shame he value his life more than his duty. With awesome he shared, these days there are more than four extremist groups active and he cant go to the field wearing his uniform for he will be gunned down without being questioned. Three years of his service is remaining and for years he has served on foot expecting that may be some day he will get a bicycle from the government to work more efficiently. In pain he expressed I have to supervise NREGA work being carried out, I have to deal with the extremist who constantly demand levy, I have to work in field creating enmity with public when I franchise my responsibility. How can I allow any one to cut trees in front of my eyes, I am left grumbling alone in front of those groups who come with axes and other weapons, he stated. According to Nand, forest offence are not penalised severely resulting as an incentive for the destroyers of the forest. Worst as he said is when fake complains of bribery are made against a guard who try to fulfil his duty. If we try to give justification we are blamed of arguing with officers and are transferred within twenty four hours, he said resentfully.

Nand explained the dilemma of his position. He said like you, last week a team from Delhi came to check 2003-2004 plantations. The team wanted to be taken to the plantation site. We denied taking them that side, consequently the team sensed that there must be some corruption in the plantation and so these people are trying to avoid. Team insisted so we had to take them. The tem was trying to locate the flaw being tried to hide and finally they could locate the flaw only after being abducted by an extremist group along with their vehicle. The team from Delhi along with the forest office staffs were kept hostage for half an hour and were left after proper investigation

but had to lose mobile phones and cash money. Lastly Nand told that he is waiting for his sons to take up job, the day they will take he will resign.

In Gidhor Block of Chatra the first village I visited is Tillaya. The first Van Samiti was formed in the year 2003 when adhyaksh and other members of the committee went to Ranchi, the capital of Jharkhand, to attend workshops and seminars. The first committee is still there and it has not been renewed ever since. The villagers could easily locate their village forest. When I asked about forest department role, they complained that they have always been kept in confusion. The solar lamps distributed in other villages have not been distributed in this village. The expected benefit from forest department in terms of road, ponds and tube wells are still expected from the forest department. Adhyaksh of the forest committee Md. Sameem Ansari is also a munshi for the collection of Kendu leaves and Sal leaf plates. He said that they like other villages were seldom able to supply a truck of Sal leaf plates and hence were missing the share from royalty. Now two three village supply together and share the share from royalty.

The village seem to agree with each other for the fulfilment of wood for domestic and agricultural need but disagrees with any one taking the advantage of the liberty and taking woods to the market. The violators are often fined and penalised by the committee in front of the whole village. The outsiders are denied to collect fuel wood from their forest but outside cattle are permitted to graze in their forest as their cattle also go to other's forest. During my visit to the village about seventy percent of the household in the family were engaged in making Sal leaf plates and collection of Kendu leaves. From Sal leaf plates each family is able to earn Rs. 150 to Rs. 200. The collection of other NWFP's like Mahua, Chiraita etc are done for domestic purpose and if collected more than that can be consumed by the family are sold in the market. When I asked to whom does this forest belong they replied Government but said why being in committee should work free without any financial aid. On extremist issue they said that extremist asks them to save forest, extremist don't interrupt us from bringing fuel wood but those who damage forest are beaten up. The wild animals like elephants and wild bore do pay their visit to the village occasionally. The committee has eighteen members comprising four women.

Bariatu is the second village in Gidhor Block where I visited. In this village there was no committee like Van Samiti. The residents of the village were not aware of their Khatiyani forest but agreed to be saving forest near their village for environmental factors like fresh air with more oxygen and forest bringing rain in addition to the fulfilment of their need. Solar lamps have been distributed in this village. At present breaking of Kendu leaves is not permitted. The outsiders are not allowed to come to their forest and they oppose it and even do physical harm to the notorious invaders. A lady in the village told me honestly that NWFP's acts as a buffer to them, when their main source of subsistence i.e. agriculture betrays them leading into poor harvest, they have to make their living by selling from the stock of NWFP's that they had collected for their use. The villagers said that they don't face any problem from extremist. Thinking me of representing the government the village people requested me if I could make electricity available to their village. Some times it really gets difficult to answer a question which I could not dare.

The last village which I visited in Chatra district is Dari Ati of Chatra Block. The first Van Samiti was formed in late nineties whose reminiscence remained. A month before my visit to the village, solar lamps were distributed in the villagers. The adhyaksh Mr. Bisnu Dev Ram of the committee said that he along with the forester has formed Van Samiti in many villages. They were aware of their Khatiyani forest registered in government records. Villagers complained that the forest department has not provided roads and ponds like the way they have provided in other villages. The villagers said that they bring fuel wood from their own forest as bringing wood from others forest always leads to quarrel and fight. Mahua, Dori, and Sal leaves are collected from the forest both for domestic and market depending on the prevailing condition. Expressing their dependability on forest to sustain their life they accepted that they will save the forest even if the forest department does not support them. Mr. Bisnu told, we have been requesting in the range office for more plantations in the village but we are sent back with an explanation that a man having four sons can not fulfil the needs and requirements of every one with a month's salary. As I was leaving Mr. Bisnu, a man in his sixties appealed to me if I could request their District Forest Officer (D.F.O) to consider Dari Ati for future plantation.

After returning from Chatra I retrieve my field work in Hazaribag District. This time I selected four different blocks of Hazaribag. The first block was Binugarh in which I started from Godhia village. The village was wonderfully located inside a dense forest and being there was pleasure. Van Samiti came into being here in 2003-2004 comprising of eighteen members out of which four are females. The people in the village could locate their seventeen hundred acres of forest. The people here too depend on forest for fuel wood to cook food. In almost every home the cattle go to forest for grazing and if not then fodder is brought from forest. The outsiders can send their cattle for gazing but are not welcomed to access their forest for any other purpose.

When outsider comes an eye is kept that they carry leftovers only, which are useless for the villagers. I asked about the role of the forest department and asked what the village has received so far? The Mukhiya of the village told me that they have not been given solar lamps and apart from it they showed their interest in the funds provided by the forest department for roads, ponds and tube wells. I addressed the mass and asked them that have you registered the Van Samiti in the range office and do you know that after registering the village is bestowed for the ninety percent profit coming from their forest. The mass was surprised and started murmuring among them and the mukhiya started shouting on the people saying I have been telling all of you to get aware and protect forest, now at least get started.

The village don't face any kind of objection from any one in bringing wood from forest for their necessity. Few residents from the village go outside the village to earn money when crop fails. At present few NWFP's are collected from the forest for domestic purpose. The collection of NWFP's like Kendu leaves, Sarai and Dori is not done because of the intensive labour that it requires and labour not being paid adequately. If they will be paid well they are ready to collect the NWFP's to fulfil the commercial need. One of the reason I verified for villagers not being interested in collecting NWFP's is that the agricultural condition in the village has improved considerably in the recent years making them reluctant to work paid less. Godhia longs for little support from the government and demanded financial aid for the members of the committee to make them responsible and answerable.

Driving down away from the highway linking Hazaribag and Bagodar in an area which looked uninhabited I met two young boys in a school building, protecting themselves from the rain were busy breaking Dori to take out its seed for oil. One of these guys was recently bitten by a poisons snake causing two of his right finger to melt out. The guys told me there is a village three kilometres away from the school building. I was proceeding towards the village but was blocked by heavy shower of rain I stood by a small hut were I got the company of two tenth class students who told me that these days the forest is not as dense as it used to be. I asked them about the presence of wild animals in their forest. They told that there are rabbits, porcupine and wild bores in the forest and some times people come for poaching. He recalled previous year incident when a lady collecting fuel wood in the forest was attacked by a wild bore in her thy. She was brought to the village and forest department was informed that if they will not come bore is going to be hunted and killed. The D.F.O along with the ranger came and paid the compensation of Rs. 30000.

When it stopped raining the road took me to a big village named Kolhu. I searched for the adhyaksh of the Van Samiti who had gone out of the village. In his absence I found the former adhyaksh of the committee Mr. Amrit Prasad. He was the first adhyaksh of the committee formed in 2002. After this the second committee was formed in 2005 having eighteen members out of which half the members are female. The committee understand its responsibility to protect forest. Villagers were aware of the Khatiyani forest of 300 acres. They complained me that in the aid from forest department they have received water well. The village expects solar lamps, roads and ponds from the forest department. The villagers said that the forest has become dense after the formation of committee. The villagers are free to bring fuel wood from their forest but wood for domestic and agriculture purpose permission from the committee is mandatory. The outsiders are denied to access the forest for fuel wood but their cattle can come and graze. At present there is no collection of Kendu leaves and Sarai. Sal leaves are collected in the village on demand. Only Mahua along with other seasonal herbs are done for domestic purpose and rarely for market.

While I was talking to the adhyaksh a man in his fifties made his presence and took part in the discussion. He said that we protect forest for fuel wood, wood for house making and agriculture purpose including fodder for cattle. The cattle in the village are all of indigenous breed and can survive only on forest. The villagers agreed that thirty percent of their need is fulfilled from agriculture. Fifty percent comes from the labour in the nearby towns and ten to twenty percent comes from the forest. About the quarter of the village sells Mahua at an average rate of Rs. 8 a kilogram. The man looked wise and told the forest in the village got reduced because of the careless use by the villagers. Earlier people use to bring fuel wood from the forest without considering any thing which uses to amount three to four times then their requirement. If once a family goes to the forest they will cut and stock for two to three years.

The man spoke in agony, of tears coming down from his eyes when he sees thin offshoots coppicing from Sal and other trees being mercilessly chopped down from bottom by the female fuel wood collectors for they are easy to be carried. When we try to stop them there is a full throttle backfire, have you planted them and watered them in your private land. Most of the men go out of the village to earn money. It's the responsibility of the women to bring fuel wood. Hence for their convenience they cut the young offshoots for they are easy to be carried and ignite easily but last soon. Earlier in every house the annual consumption of fuel wood were fifteen to twenty bull carts but these days it has reduced considerably to four to five bull carts but still much of the forest is being destroyed by the female fuel wood collectors.

The adhyaksk and the man whose name I forgot to ask as I got so much consumed in all that he was explaining told that inspired by a school teacher named Mahadev Mahato from the nearing village the villagers have done Raksha Bandhan with trees in fifteen to twenty acres of the land from where they do not even break a leaf. Raksha Bandhan is non religious festival in India where females tie a bundle of thread around a male right wrist to declare a brother sister relation. Now this tradition is being followed in and around villages where the males and females go to the forest they want to protect and become the refuge. Anyone trying to harm this forest has to face the extreme form of punishment.

The villagers asked the forest department to donate a portion of barren land in the forest land for the plantation of fruit bearing trees but were denied by the authorities. Few men in the village showed their interest and were discussing among themselves that we need more trees to be planted in the private lands of the village. They said that it will be better if the department will come and distribute trees to the villagers. They themselves said that we are ready to purchase saplings from the forest department for they won't value the thing that comes for free, for Sesame and Sag Wan trees payment up to Rs. 20 and for fruit bearing trees up to Rs. 50. They suggested that if they will plant trees in their home they will need to prune it for its growth which could reduce the pressure on the forest. Every one present in the meeting demanded for the coope system to be retrieved and more plantation in their forest. The adhyaksh told that during his tenure they cleared a plot of forest for fuel wood and it got reported in the range office however the forester could not come for inquiry for two months. When the forester came he said thanks god if any one else will come in round I will not be caught. The reason for his relaxation is the high rate of coppicing in that plot. The residents told me that if a plot is chopped from bottom every tree gets good sun and air and the growth is equal and fast where as the tall trees render the growth of saplings and reduce coppicing.

In the Bagothar Range I went to a nursery where I met Parsurai Sharma who works as a guard. He told that there are altogether 356 nurseries in Jharkahand. I asked him about his work and how he manages to do. He pointed on the lack of infra structure and the big area he has to cover. Like others this guard also did not have a government motor bike or a cycle. He infomed that Kendu leaves and Sarai are collected in his area but this year there is no work on Kendu leaves. Similar to Kendu leaves the auction for Sarai is done and the munshi appointed by the contractor collects Sarai in the village but some private business is also done by the villagers, he said. Parsurai believes that the stealing of wood from forest has reduced because of the extremist fear but at the same time confirms the presence of wood gangster by extremist support. Government is developing Van Samiti but is not is not developing forest. Soon after the formation of committees, members look for incentives and loose interest when they don't get it. First year they happily plant trees and by next year they are ready to cut. Women going to the village are difficult to be controlled for him being a male is scared of allegations relating seduction.

As I reached Sadaro, a tola of Baje village in Bisnugarh Block, a man came and wished me Johar (tribal tradition of welcoming, practised in Jharkhand). I told them that I have come to meet them and ask if they face any problem in accessing forest. They brought a khatiya (a bed made of wood knitted with natural fibres) for me and offered me to have a seat beside an old lady who was busy knitting mat with dry palm leaves. They told me that the Van Samiti in their village was formed in 2001-2002 comprising fifteen to twenty members. No one stops them to bring fuel wood and wood for domestic and agricultural purpose from their forest but they do stop others from taking wood for any purpose. The main source of subsistence is agriculture complemented by the forest. Mahua, Dori, herbs and mushrooms are mostly collected for fulfilling domestic need. Sarai, Sal leaves and Kendu leaves are collected for commercial purpose. They reported their forest to be constant in growth without any increase or decrease in growth. These people do not eat mustard oil but survives on oil from Mahua seed, mustard oil is rarely used. They believe in saving the forest for they understand that it's a must for their living and by protecting forest they protect their lives. The people in that village wait for solar lamps, roads and ponds to be provided by the forest department.

Narki is village in Bisnugarh beside the Konar River separating it from Bermo. This was my last village that I had been in Bisnugarh. In this village the Van Samiti exists since 2003. The committee has about ten members as explained by one of the correspondent Md. Nasir Ahmed who was feeding buffaloes when I visited him. He like many others accepts the decline in the forest due to the careless use of the forest in fulfilling the needs of fuel wood by women, and wood for house making and agricultural implements. In some of the houses the food is cooked on coal from the nearby coal mines in Bermo but still coal is occasional and food is mostly cooked on woods brought from the forest because it comes for free. Though in some of the houses wood is bought instead of coal it is cheaper. In the village the committee is dormant and there is no restriction in bringing wood for domestic and fuel wood but the selling of timber in market is discarded. NWFP's are collected here both to serve domestic need and market demand. Md. Nasir observation says that the forest in the recent years have grown due to awareness in the village. The presence of the outsiders in their forest is considered as trespass but offence is not taken against the presence of outside cattle as it is difficult to be determined. Md. Nasir agrees that the village

depends on unskilled labour for the major portion of their need, about thirty percent is achieved from agriculture and about twenty percent is covered from forest.

In Hazaribag there is a Wild Life Sanctuary. This Sanctuary lies in the purview of Padma Block of Hazaribag. Behind this Sanctuary there is Donai Kala Village. The village depends on the woods of the Wild Life Sanctuary to bring fuel wood and cattle grazing. The residents from far off villages come here to collect fuel wood. Among the animals most frequently seen by the villagers are deer, peacock, monkey, wild bore, elephant and porcupine. Van Samiti in this village was formed in the year 2003-2004 having twenty seven members with twelve females. I could not meet the adhyaksh of Van Samiti but I was lucky to meet the head of the Mahila Mandal of the village Mrs. Jasoda Jaiswal. The major sources of income in the village is agriculture and lesser is labour. The committee on its behalf try to protect forest and animals of the sanctuary but regrets to inform that still the stealing of wood by outsiders are in practice.

I asked them that this is a Wild Life Sanctuary and guarding by the forest department guards must be high so you must be facing difficulty in bringing wood for house making and to fulfil agricultural need. They were not surprised with my question but answered they do not face any difficulty and said consciously that we do not need to steal as there is enough that the nature provides them. Every year there is a number of heavy rain and storm which makes the tree fall and die. These dead trees are sufficient to fulfil the need of every one in the village. Among the NWFP's the villagers mostly collect Mahua, mushroom and herbs for domestic purpose. Few collection of Kendu leaves and Dori is done by the ladies of the schedule tribe exclusively for commercial purpose. The committee on the village behalf, from the forest department has received one first aid box, fifty chairs and one five horse water pump. The village longs for a check dam to be provided by the department. Jasoda told an interesting thing being a women and as she understand, when a girl child is born it creates a pressure on the family to arrange money for her future marriage. If the family will plant few trees in the name of the daughter then by the time the girl will attain maturity to get married, the trees will be also be ready to take the financial burden of the marriage.

In Orparta village of Barhi Block, Mr. Govind Yadav is the adhyaksh of Van Samiti. The concept of Van Samiti in the village exists since the early ninties and it was 2003 when the reunion of the present committee took place. The residents in the village too like residents of other village that I visited depend on the forest for fuel wood, cattle grazing and wood for domestic and agricultural purpose. The villagers do not have problem in outsider's cattle come and graze in the forest but have problem with outsiders coming to their forest for collection of fuel wood even. Goind a man in his fifties also works as a guard in the nearby forest land where plantation has been done by the forest department. He complains that he is not being paid regularly by the Range Officer Ajay Yadav and forester Surender Pandey. Whatever money he has received is less than the money promised he quibbled. He and his crew member complain that a pond has been given by the forest department but the forester and the range officer have not delivered the watering pump issued to the village. As a result the village has lost interest in taking care of the plantation and do not care plantations being destroyed by cattle. The residents of the village look for incentive in any form to pay their duty.

The main source of survival in the village is agriculture followed by labour but acknowledge that the forest fulfils twenty five percent of their need. The villagers reported of not facing any problem from extremist. They told me that there was a man in the village who was ready to give his land for tree plantation but the villagers did not support him for the fear that forest department will not allow to franchise their liberty after the tree gets mature. Now regrets and tell the story of the nearby village Chatro whose mukhiya was intelligent and planted trees on the rayatti plot in the village and prospering because of it. The members of the Orparta village showed interest in paying for the saplings of fruit bearing trees provided by the forest department if distributed in their village. To my surprise the people are ready to buy at the price more than ten times at which the forest department sells. At present forest department sells sapling at the rate of Rs. 1.50 each.

To see the reality in the Chatro Village I went there. I could see lot of eucalyptus trees planted in and around the village and piles of wood kept there. I saw people outside their home designing plough and yoke in preparation of forthcoming cultivation season. The first committee in the village was formed in 1983 as Daulat Mahato the mukhiya of the village told me. For fuel wood and cattle grazing they go to the forest and other domestic and agricultural need is fulfilled from the forest they planted in their own land. The outsiders to the village can come to their village for fuel wood collection and cattle grazing. Those who try to steal wood from their forest are handed to the forest department. As an aid from the forest department the village has received just four solar lamps. They complained that they haven't got any pond or road made by the forest department. All of them understand the need of trees and demanded for more trees to be made available to them even at higher price as nurseries are far from them. They calculated for some moment and said for any demand from the range office they had to run several time and each visit costs more than fifty rupees in travelling so they prefer to pay bribe and get their work done.

Mukhiya told me that earlier there was a problem of water in their village and it was difficult to provide water to animals but the cattle were able to survive on Sal leaves without much water. Many times when they catch anyone stealing wood from their forest they call the Range Office to get a response that there is no one at present to be send. The ladies in the village recall those days five years back when deer came into their forest to live and following them the poachers came. Those were the wonderful days when the whole village united to protect the honour of their forest and defended the poachers. Later the forest department staff came and took the deer away. Still I could see resentment in them for agreeing that they have lost much of their honour in relation to forest due to their own taken for granted attitude in the absence of incentives. The last words that the mukhiya told me spreading his arms out *agar sarkar hum ko thoda madat kar deta to itna mota mota gach dete*. In English it means if government would have supported a little we would have returned them trees of girth equivalent to his arms stretched wide.

In Chauparan Block of Hazaribag I visited in and around a village named Ahari. When I went to the village I could see people bringing wood from the forest. The village is surrounded by small hills all around having dense forest grown over them. The forests in the hills are so dense that the rocks and the big caves present in it are not visible from outside. I could finally convince a group of men engaged in roof repairing of their house made of mud to talk to me. They informed me that the first committee in the village was formed in 2004-2005 comprising around twenty five members of which about ten are females. The forest department has provided the village a pond but has not yet provided road, tube wells and solar lamp. Outside cattle can come in their forest but the people from other villagers are not allowed to collect fuel wood from their village forest. Collection of Kendu leaves is done here which provides about Rs. 1000 to Rs. 1500 in fifteen days. Sal leaf work is done seasonally during marriages and festivals when there demand increases. Presently Sari is not being collected in this area. Mahua and Dori are mostly collected for domestic purpose.

Mustard oil is secondary and oil from Dori is used for cooking and other purpose. The villagers save the forest as it fulfils their needs. You can see we are repairing the roof of our house with the help of woods brought from the forest, if there will be no forest where will I live, they explained. The people in the village know each other and can estimate the required need of any person. So no one objects anyone from fulfilling there need but selling of wood in market is more like taboo and left over to forest department to handle. The villagers were able to locate there Khatiyani forest. They said the forest near there village are all there because they can dominate in it and have been saving. Lastly they seem to believe that forests represented in the map representing their village boundary are theirs. When I was returning from the village I met the adhyaksh of the Van Samiti returning home with his herd of cattle. He discuss on the issue regarding distribution of solar lamps.

Driving back from Chauparan I stopped in a check post in the National Highway No. 2. to meet the guard. I said, I have come to greet you and ask how you manage to work here in a place which is disturbed because of the intense extremist activities. He said I joined the department on daily wages looking after Kendu leaves work in 1977. His job got permanent in 1979 and he is scheduled to retire by June 30th

2012. He feels bad about his juniors having less experience been prompted to higher post. Hearing about his life style due to his work was miserable. This man is alone to guard eight sub beats which reaches up to 20 sq Km. in addition to be present in the check post in N. H. 2, one of the busiest routes stretching from East to West of India. This road is also known as Grand Trunk Road made by Baber of Delhi Sultanat. For fulfilling his duty he has not been provided with any government vehicle or even a bicycle. He remembers a friend of his working in the forest department as a guard being kidnapped by extremists whose dead body was recovered in the failure of payment of the demanded ransom. He has no one else to whom he can leave post to go for nature calls. He introduced me to a dumb man sitting beside him saying, he is the only friend that I have, who works in one of the nearby hotel, who brings cooking ingredients for me. In the sway he said I have no one to talk here except this dumb guy to share my loneliness.

When I asked him about the working of the Van Samiti he clarified that government is in illusion. The government has stopped recruiting the fourth and third grade staff in the forest department. At the same time it has started devolving power to the villagers. He said that he is going to retire but has served the forest and want it to be everlasting. He appealed for the promotion of local people in the department as an employee to work better. He agrees that all the people are not alike but knows certain incidents in which the adhyaksh has been involved in the illegal supply of wood in the market. He being a guard has allowed many time to the villagers to fulfil there legitimate need, hiding from his senior officers and has been reported by those villagers of bribe being asked by the committee members. The samiti allow the bringing of the branches of the green trees in lust for levy. Many time the unskilled ladies belonging to the committee fight to work in the nursery for being the member and increase the unnecessary burden of labour payment.

It got late in the evening and I had to return a long way back. Yes it's a good experience to drive along an unending way but being human we do get tired and feels like retreating, so one should know where to take the plunge. In my journey I had a company of so many people I came across, shared our views and supported each other to join an unending relationship through our rights on the Forest.

Section 5: Interpretation of Field work

In Hazaribag District and Chatra District of Jharkhand as we move away from the town the dependability of people on forest increases. In Jharkhand region the forest land and rayatti plot which is a private land are interwoven. As a result a major part of the population lives in and around recorded forest. Most of the forest in Hazaribag District and Chatra District are protected forest. Villages near the forest land access forest to supplement their various needs. These villages have rights over nearing forest to fulfil their needs which are recorded in Khatiyani Part II. None of the villages I visited had a copy of Khatiyani Part II. Villagers are not able to defend the exact rights they have. Hence an ambiguous bundle of rights prevail in the region. Most of these people acknowledge forests as a property of government as their access depends on the mercy of forest department which is the first line of adjudication for forest dependent population. To work with the villagers in harmony the forest department has been doing favours to the forest dependent population by providing them solar lamps, tube wells, first aid box, ponds and school buildings to develop trust.

As there has been no recruitment of fourth and third grade staff for more than two decades the average age in the forest department is forty eight. Consequently for the management and protection of forests formation of Van Samiti in every village is in process. Many villages themselves took the initiative to protect their forest from outsiders out of fear of insecurity. What is generally considered as village forest for which these Van Samiti has come up are the one in which the villagers can dominate treating it as a private forest and decides whom to be excluded from access and influence. A village forests is a common property for the members of the village. In an ambiguous bundle of rights entitlements in community forestry identified from field work are as follow (i) Fuel wood (ii) Cattle Grazing (iii) Wood for house making (iv) Wood for agricultural implements and (v) Collection of Non Wood Forest Products. The access and influence of these entitlements are determined by the members of Van Samiti for the members and non members of that village.

To regulate entitlements informal rules or norms are in practise which are as follow (1) The village take the collective responsibility of guarding the forest they dominate from felling of trees by outsiders (2) The members of the village do not object each other for the legitimate need of timber for house and agricultural purpose (3) The members of the village are free to access forest for collecting non wood forest products (NWFP'), with the principal of "first to use" (4) The cattle of the village can graze in their forest as well as on others forest (5) People from nearby villages good in terms with the village can come for collecting fuel woods only and send their cattle for grazing (6) Villagers from far off villages are not allowed to collect fuel wood but can send their cattle for grazing (7) The members of the village having forest do not accept each other felling trees for market purpose (8) accessing others forest for forest produce is an offence, and (9) Outsiders to the village are not allowed to practise poaching in the village forests.

The next two chapters discuss in detail the entitlements in community forestry and informal rules or norms practiced to protect these entitlements. An analytical approach has been made to describe the ways these entitlements have been assigned to different villages and how they access it. The origins of the norms in relation to entitlements have been discussed with an attempt to establish possible relationship between the two.

CHAPTER 4

Forest as Property

The word forest is derived from a Latin word “foris” meaning “outside”. Outside refers to outside village boundary or fence which must have included all the uncultivated and uninhabited lands. For some forest is an area with large cluster of trees, small and big having bushes underneath, away from the habitation, for others forest is a land mass having large group of naturally grown trees where wild animals and aboriginals live. According to the Indian Forest Act 1927, forest is defined as a track of land covered with trees, shrubs, bushes or woody vegetation whether of natural growth or plantation by human agency and existing or being maintained by with or without human effort, or such track of land on which such growth is likely to have an effect on the supply of timber, fuel, forest produce, or grazing facilities, or on climate, stream flow, protection of land from erosion or other such matter and shall include (i) land covered with stumps of trees of forest (ii) land which is a part of a forest or was lying within a forest on the first day of July, 1962, (iii) such pasture land, water logged or non cultivable land, lying within, or adjacent to, a forest as may be declared to be a forest by a state government.

In earlier days no one knows who ruled forests and controlled their flow resource units. It was more like an open access resource to a great extent where no one could stop the use of it. That was the time when people lived more a nomadic life, moving from place to place in search of food and shelter. As time passed serendipity of agriculture took place in different parts of the world and lead to the quest for better cultivable land. This controlled the mobility of the generations in comparison to their previous generations and gave rise to the formation of villages. To fulfil their need easily for sustainable period of time the concept of management of the nearby forest must have evolved over time. This same procedure might have taken place in India. Then later several of these villages might have developed a common trading centre which later resulted into towns. These towns and villages were controlled by the strongest of them mostly zamindars, who were under the purview of the Rajas and Maharajas of the territory. This situation continued till the British came. The British India used the forest resource to satisfy their colonial needs.

To manage the forest resources for its purpose, the British created the Imperial Forest Department in 1864. After this the first forest act was passed in 1865. Before this time use of forest for commercial purpose in such a vast scale had not been done. For constant supply of timber from forests 'Scientific Forestry' based on European Silviculture was introduced. The rate of extraction of wood from forests must not have been in harmony with the traditional system of indigenous forest management principles. As a result British started criticizing the traditional system of forest management. The criticism emerged as a backbone of the justification reserving forests. The British government in India believed that only a trained centrally organised cadre of officers could properly and scientifically manage forests. Consequently 1865 Act was strengthened on the recommendation of German agriculturist Dr. J. A. Voelcker in 1894. Many sympathetic outsiders like Verrier Elwin (1936) defended traditional system of not being as destructive as declared by British. I don't find a reason to disagree with Elwin but would say that traditional system did not emerge to serve the commercial demand on a large scale.

With the commencement of 1894 Act the traditional system of forest management got replaced and the forests in India got divided into (i) Reserve Forest (ii) Protected forest (iii) Private Forest, and (iv) Village Forest and Waste. Anderson and Huber (1988) explained that the reserve forest were solely for commercial purpose except for the collection of certain minor forest produce and for watering cattle and lesser for grazing. In protected forest allowance were fixed and defaulters were fined. Villagers were not allowed to hunt, graze livestock and cut timber for basic necessities in a protected forest. For commercial use village forest were assigned. The most accepted view by scholars behind restricted use of forest was timber yield and to overcome obstacles arising from cultivation, lopping and grazing. The act was justified on the ground that the aboriginals were not able to manage their forest without the help from British.

After independence, the legacy of British India Forest Acts prevailed and its traces are found in Indian forest policies. British retreated to their home land leaving many forests in the hands of zamindars. Guha (1983) sees scientific forestry as the back bone of Forest Act of 1952 which empowered the state at the expense of forest communities. To get the forests back from zamindars and to supply the unending need

of growing industries, commercials, and communication and defence requirements the forest areas under the state control was doubled from 26.16 million hectare to 53.83 million hectare in 1950-1 without properly implementing the existing law or making necessary amendments. Doubling the forest cover after independence took the private forests away from zamindars. If forests would not have been taken away from zamindars it could have been better maintained by their private owners.

From the knowledge of history of India one knows that after 1857 revolt British never interfered less with the culture and religion of the people. That's the reason why I guess that they notified limited amount of forest as reserved under different categories. Even after reserving forest British provided sufficient rights to the forest dependent population valuing their custom and tradition, as mentioned in the Indian Forest Act 1927 but have gravely been neglected after independence. Doubling the forest land without bringing efficient change in the existing law changed the balance of the system. Many forests were either destroyed or burned in protest. Today it's very difficult to distinguish different types of forest as mentioned in the existing Act.

According to the Indian Forest Act 1927, Reserve Forest is a forest land or a waste land which is the property of government, or over which the government has proprietary rights, or to the whole or any part of the forest produce of which government is entitled. The right to declare a forest as protected forest is vested on the state government through notification in the official gazette to any forest land or waste land which is not included in the reserve forest but which is the property of government, or over which government has propriety rights, or to the whole or any part of the forest produce which the government is entitled. The formation of village forest is also vested on the state government. The state government may assign to any village community the rights of government to or over any land which has been constituted a reserve forest, and may cancel such assignment. All such assignments shall be called village forest. In the act there is no description on private forest.

The Law of property gives the legal frame work for the allocation of resource and distribution of wealth. The presented classification of forests can be best understood in the light of property rights. In reserve forest the government has the ownership rights who decide ownership, control, access and influence. In reserve forest all the rights are reserved by the central government unless permitted. The government gives to people the right to access and influence, refers to use of resource and have some say over access, control and ownership. In protected forest the ownership right belongs to the central government whereas the state government has the control rights, conferring use and exclusion. In protected forests the access and influence rights belong to the people. The protected forest differs from reserve forest on the basis of rights as the former have all the rights permitted unless reserved. Village forest is a special condition of reserve forest in which the government assign the control rights to a village community. A private forest is one which is grown in private land but the owner of the land has rights of control, access and influence.

In Jharkhand the total land area is 79,714 Sq Km. of which 23,605.47 Sq Km constitutes recorded forest area, making one fourth of the total geographical area. Eighty one percent of the recorded forest area which is 19, 184.78 Sq Km constitutes protected forest. Reserve forest makes 4,387.20 Sq Km and the rest is classified as unclassified forest. There are about 13000 villages in the protected forest. In Jharkhand the reserve forest is mostly present in Saranda Division, Kolhan division, Porahat Division, Dalbhum Division and Daltongunj South division. Other wise in major part of Jharkhand protected forest is present. In Hazaribag West Division the total forest area is 177537 ha out of which 673 ha is reserve forest. Hazaribag East Division has total forest area of 103798 ha of which 1743 ha is reserve forest. Chatra South Division has total forest area of 102580 ha of which 752 ha is reserve forest.

Soon after independence of India in 1947 the management of protected forest in Jharkhand region like other parts of India was handed to the Department of Forest and Environment. As a result many new forest divisions were created. Like reserve forest working plan for protected forest were made by the Department of Forest and Environment. To generate revenue, commercial cutting of trees were prevalent in reserve forest. This commercial cutting was known as coope. In the same note coope was implemented in protected forest to generate revenue. Coope was cut by private

contractors under contract with forest department. Coope system was prevalent till 1980 soon after which a wing was created in the Department of Forest and Environment in every division to manage commercial harvesting of forest.

Under Section 30(b) of the Indian Forest Act 1927, the State Government has a right to reserve any forest as protected forest for a term not exceeding thirty years. Between 1951 and to 1980 in independent India, the country suffered a loss of 43 lacs ha. of forest which was diverted for various development projects. This loss of forest created enormous hue and cry among various sections of the society and lead to the formation of The Forest Conservation Act 1980. The Hon'ble Supreme Court of India in its land mark judgment dated 12. 12. 1996 (Civil W. P. No. 202/95 T.N. Godavarman Thirumulpad Vrs. Union of India and Others) observed that "The Forest Conservations Act 1980 was enacted with a view to check further deforestation which ultimately resulted in ecological imbalance and therefore provision made there in for the Conservation of Forest and for matters connected there with, must apply all forest irrespective of the nature of ownership or classification thereof. The word "forest" must be understood according to its dictionary meaning. This description covers all statutorily recognized forest whether designated as reserve, protected or otherwise for the purpose of Section 2(i) of the Forest Conservation Act 1980. The term "Forest Land" accruing in Section 2, will not include "forest' as understood in the dictionary sense but also any area recorded as forest in the government record irrespective of the ownership".

By 1990 it was realised in Jharkhand that the commercial harvesting of forest is not in accordance with the working plan. Consequently commercial harvesting of forest by forest department got obliterated. The termination of commercial harvesting in the protected forest resulted from the consequences generated by the commercial harvest of few forests which were discordant with the prevalent working plan. Arvind Kumar, Assistant Principal Chief Conservator of Forest wonders why the standards accepted in the working plan were never discussed and clarified.

The protected forest in Jharkhand like the rest of India embraces Section 29 to Section 34. In the protected forests Section 30(b) provide special provision for the exercise of rights of the forest dependent people. According to the prevalent act and working plan any protected forest cannot be completely closed and every year at least 1/30 part of the protected forest should be kept outside the protected forest in a locality reasonably convenient, for due exercise of rights suspended in the portion so closed. The portion so kept is accessible only to those people to whom it has been assigned and the state government has no rights over it to use, for any commercial purpose to generate revenue.

Prior independence the control of these forests were in the hand of zamindars. In these forests Section 30(b) was not enacted. The zamindars were free to exercise their control rights on protected forest and on their desire and understanding allowed the contractors for felling of trees and get paid in return. After independence the forest under zamindars were declare either a reserve forest or protected forest but the felling of trees by private contractors prevailed on large scale. The revenue generated from the felling of trees by private contractors was deposited in government account.

The forests from zamindars were taken by the government after independence and Indian Forest Act 1927 was applied on them without giving importance to Section 30(b) of it. The standards accepted in the working plan gave importance to the commercial felling of trees and the rights of the forest dependent population were neglected. Since 1990 the commercial felling of protected forests by forest department got abolished and with it whatever minimal rights prevalent under Section 30(b) got diminished.

Since 1990 the commercial felling of trees is not in practise and with the formation of Jharkhand Government in 2000, the Department of forest and Environment in association with State Government marched towards the development of Forest Development Agency (FDA). The foundation of Forest Development Agency rests on the commercial felling of trees and ninety percent revenue generated from this felling will be given to the village which is understood as Joint Forest Management. For more than seven years since the formation of Jharkhand as a separate state, none of the Forest Development Agency (FDA) has achieved its goal.

Commercial felling of trees as the backbone of Joint Forest Management has given importance to revenue generation and has once again neglected the rights of the forest dependent population entitled by section 30(b) of the Indian Forest Act 1927. As a result in last two decades neither Government nor the forest dependent population could have their rights fulfilled from forests. Section 2 of the Forest Conservation Act 1980 recommends State Government or any Authority to take Central Government approval before de-reserving a reserve forest, any forest land or portion thereof to be used for Non Forestry Purpose, any Forest Land or portion thereof to be assigned by way of lease to any person or agency/organisation owned by government, any Forest Land or portion thereof be cleared of trees grown naturally on that land, for the purpose of re-forestation. Non Forest Purpose(NFP) means clearing of any forest or portion thereof for the cultivation of tea, coffee, spices, rubber, palms, oil bearing plants, horticultural crops or medicinal plants; any purpose other than re-forestation. Non Forest Purpose (NFP) does not include work relating or ancillary to conservation, development and management of forest and wildlife.

Hence the one forth of geographical area of Jharkhand which is protected forest covering about 13000 villages are entitled to have social, economic and cultural rights provided through section 30(b) of the Indian Forest Act 1927. This historical negligence in the history of Jharkhand is required to be fulfilled. The power vests in the hands of the Jharkhand Government and The Department of Forest and Environment, and they don't need any approval from the Central Government for the application and implementation of section 30(b) of The Indian Forest Act 1927.

In the light of above mentioned facts The Schedule Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 confirms the negligence of The State Government and The Central Government. The first line of the Act says "An Act to recognise and vest the forest rights and occupation in forest land in forest dwelling Schedule Tribes and other traditional forest dwellers who have been residing in such forests for generations but whose rights could not be recorded; to provide a framework for recording the forest rights so vested and the nature of evidence required for such recognition and vesting in respect of forest land". In Jharkhand the rights of most of the villager are recorded in Khatiyani Part II without a provision for these rights to be franchised. The demand of the time is to have laws

which clearly define property rights in forests with a frame work of its regulation. A judgment regarding reservation of forests as protected for a term not exceeding thirty years is awaited.

Section 1: Forest as Private Property

The felling of trees on commercial scale in India was started by British. For the purpose they required a constant supply of timber from forest. For a good timber a tree needs a maturity on an average of forty years. As a result for the first time the scarcity of wood for constant supply of timber was realised. Scarcity of a good or resource is an important characteristic which requires proper allocation and distribution of resources. It's difficult for private property to exist where resources are plentiful and unlimited as the need and justification to exclude others does not exist. Consequently British started to reserve forests in the form of reserve forest, protected forest, village forest and private forest. Rivalrous and excludable goods should be controlled by individuals or small groups of people where as non rivalrous and non excludable should be controlled by a large group of people such as state. Purely private goods that economist describe posses the characteristic of one person use preclude other. Forest was initially a non rivalrous and non excludable good. To exclude the beneficiary from forests the British Government privatised forest by reserving it and excluding certain portion in it for the claimants to exercise their rights which resulted in rivalries and excludability of non claimants.

According to economist private property is an essential ingredient in economic development due to incentive associated with it. The notion of private property came first as it can be justified only in terms of private property. When property rights are defined over private property they are easy to enforce. The vested control over private property regime in a single person hand gives the ability to exclude others from access to or use of same resource. The main purpose of the forest getting reserved was for constant supply of timber and hence revenue generation leading into development. It

was difficult to stop people to practises that were considered as destructive by the British. With reservation of forest the single person in the form of government got the right to exclude others and by defining the rights of the government and the claimant through law made the enforcement of property rights easy. These rights created a relation of a claimant with the forest in the form of endowments and entitlements and the relation of the non claimant to the forest of the claimant as not to interfere.

As I mentioned, the present classification of forest in India can be best understood from property point of view. The way of assigning value to a particular resource guides its use and exchange. Any property institutions will exhibit the “ownership spectrum” and “trespassory rules”. Ownership spectrum ranges from limited rights of bundles of use privilege and controlling power to full blooded ownership in a single person hand whereas trespassory rules protects the power in the bundle of the spectrum. The point in the spectrum resembles a bundle of private property rights. Forests have historically been valued for timbers, wildlife and non wood forest produce (NWFP). Even the cattle tress pass in the forest land is related to the damage done to the growing trees and plants, whereas the concern for the environment and wildlife is recent development. As a result anything which damages the forest is considered as trespass. The rights given to the people in reserve forest, protected forest, village forest and private forest does act as a point in the ownership spectrum and is protected by the trespassory defined by the law. For example in village forest even the government is forbidden to use it for commercial purpose. However the power to alienate is not present in the least powerful bundles of rights like those having allowances have usufruct rights to forest.

As Harris spectrum is crossed, passing from least powerful bundle to bundle of rights to the most powerful, the quality and number of sticks in the bundle increases. A private property is one of owners of different categories of bundles all over the spectrum. If this spectrum extrapolated over forest institution then it can be easily related to the top down structure of the forest policies before nineties. Different means of holding a resource do not represent the same powers, and calling these powers “ownership” is confusing and misleading in terms of nature and degree of rights one posses. Spectrum metaphor is misleading as entitlement or property interest defines adequate arrangement and the label of ownership attached to all the points of the

spectrum for substantive and philosophical reason. The full blooded ownership of forest in the end of the spectrum is of state but has no practical applicability, as for being an owner has to assign control, access and influence.

The “Exclusion Thesis” justifies the exclusive right of owner of a private property to exclude others. In Common Law as well as in Civil Law the property relation changes with the type of resource, with different rules for moveable and immovable property. With the reservation of forest it became easy to exclude and limit rights of those who were traditionally using forest for unlimited access, as the resource of forest is immovable to a great extent. One of the greatest achievements in the institutions of property is the obligation of non owners not to interfere with others property. With the reservation of forest changing it into a private property of the government obliged the non owners not to interfere with the government’s property. Right to forest is a natural right but after reservation it had rights of private property in specific points of the spectrum, a result of human derivation.

Even though reservation of forest resulted in the privatization of forest to a great extent it has a social dimension. Private property is necessarily social because of its structural asymmetry and underlying value and purpose human survival, human development and flourishing, and so on coupled with its scarcity. During British in India the forest were privatized for commercial purpose but the forest dependent population had certain rights in the forests for their existing need of the time. After Independence the rules followed during British India were continued and it generated a lot of revenue for the country for its development and to fulfil the other needs of the forest dependent and non forest dependent population like schools, hospitals and roads etc. The recognition of property’s social aspects require humans beings to explain private property and justify its power, and in particular forces every one to focus on the use made of the object of property and the general purpose of the property institutions.

The allocation of a resource as a private property creates distributional and power inequalities; have and have not's. Any act of an object of property, even its consumption changes the normative status of another person. That is the person can unilaterally eliminate or change the duties of others not to interfere with a particular object. In the first part of this chapter I accused the State Government and the Central Government for neglecting the rights of the forest people provided by Section 30(b) of the Indian Forest Act 1927. The negligence resulted in the accumulation of rights by government toward the full blooded ownership and changed the obligation of the non claimant not to interfere with claimant's property because they did not have their own. As a result the forest dependent population started trespassing forests of all types.

Section 2: Forest as Common Property

When settlers move into a new terrain they face a high risk from strangers and harsh environment. They have less knowledge about the terrain so they prefer developing a large common parcel. As time passes land becomes scarce and conflict on matter of different rights over property guide individuals to enclose land through fencing searching for institutional means to protect their investment. The more the amount of closure, lower becomes the cost of defending all the boundaries but the cost of regulating the use of enclosed land gets high. In early times when people started settling after getting a good cultivable land they develop the land and the nearing forest as common to all the members of the clan or the tribe. After developing their knowledge and dominance in the terrain gained confidence to survive with certain level of independence which resulted in the fencing of certain area of land and portion of forest earlier held in common as theirs. In this respect English Jurist Henry Summer Maine (see Grossi, 1981) is right to claim joint ownership and not separate ownership as a real archaic institution.

If we dare to forget the Indian Forest Act 1927 and the constitution of India and try to observe the life of the forest population then it won't be difficult to realise that what is generally considered as village forest is the one in which villagers can dominate and give justification for that. From my fieldwork I learned the portion that the villagers generally consider as theirs are one which comes under the boundary of the village in the map or simply the one in which they can dominate. This village forest becomes a common property of the village. An asset which every one claims a non-distinguishable claim is no one's property. The resource to which access is open is overused and it is in the common interest to restrict its overuse. The resources held in common have the following characteristics in common. First, the value of production per unit area is low. Second, the availability of resource per unit area is available. Third, return from investments is not guaranteed and it's almost low. Fourth, it's more economical to use a large area and fifth, it's more economical to build infrastructure to utilize large areas.

Every village in Hazaribag District and Chatra District of Jharkhand does not have forest. The villages that do not have forest depend on other villages having forest for their daily needs like fuel wood and fodder for cattle. As a village or town expanded in the past the agricultural land and forest land have been converted into residential places. Consequently many of the villages don't have forest for their requirements and manage to get fuel wood either from far off protected forests where no one dominates or depend on the mercy of the villagers where forest is present. The problems in bringing fuel wood from far off forests are distance, carrying capacity and the fear of being caught by forest guards. When wood is required by villagers not having their own forest, for valuable purposes like house making or furniture they take the chance to bring wood from the protected forest where no one dominates. Those villages having forest don't allow outsiders to the village to take wood from their forest for their concern of future use and their ego.

A forest in which people of any particular village dominate becomes a common property of the village. On my field work I have been searching for Van Samiti. These Van Samitis are a set of village level institutions evolved over time and not formed by the forest department people. It's the effort of the forest department to realise these evolving institutions and provide it with proper institutional

infrastructures under the banner of Van Samiti or Forest Development Agency (F.D.A). In the villages of Hazaribag District and Chatra District the main source of subsistence is agriculture and labour. People use forest for things which have economically very limited market and priced very low but its importance in their daily life makes rural life in Jharkhand possible. Many of the men go out of the village to earn money from unskilled to semiskilled labour and it's difficult to supervise their forest. So, the members of the village take the collective responsibility to guard their forest without dividing it.

The common property resource should be differentiated from properties which are open access regime. In open access no one has the legal right to exclude anyone from using a resource, where as in common property the members of clearly demarked groups have rights to exclude non members of the group from using the resource. Forest in the ancient times were more like open access but gradually as the resource started becoming scare it was over took by common property. Village forest can also be described as a type of economic good that is better referred as "Common Pool Resource" which resembles public good in developing physical and institutional means of excluding the beneficiary. In a village the responsibility of management and guarding forest is of the whole village giving opportunity to free ride. This free ride plays a negative role in community forest tempting the capable for suboptimal input in improving the resource, monitoring use and sanctioning rule making behaviour. Village forest can be compared with public goods that it faces the threat of congestion, overuse and potential destruction. Resource system in community forestry is the management and rules adopted by the villagers by mutual understanding leading into constant flow of resource units in the form of fuel wood, timber, fodder and non wood forest products. The rules of the village are regulated to some extent by forest department externally for sustainable development by limiting access, amount, time and technology use to withdraw resource units from the forest.

Two major branches of theoretical works on common property resource are moral economy approach and formal mode of rationality of cooperation. Moral economy was developed to explain local communities which are not under the strong influence of market, whereas formal mode of rationality of cooperation uses game theory as a convenient means to explain cooperation in secluded groups of

undifferentiated players in static setting. The forest dependent population mostly access forest for things which have very limited market and it's difficult to market and regulate it. In the Indian Forest Act 1927, Section 11, 12, 13, 14 and 15 for reserve forest and Section 30 for protected forest give the provision of renewal of licence for the number of cattle harvesting and other allowances. In protected forest it authorises State Government to make rules for issuing licence with payment for the allowances granted to the villagers but it's not in practise in Hazaribag East Division, Hazaribag West Division and Chatra South Division. In my fieldwork no one ever mentioned of any such payment made to any one in past. For any type of community work at village level people are reluctant to give money or hire labour but are zealous to provide labour colloquially known as *Shram Dan*.

Game theory comes with its own limitation and has reduced its applicability in the real life problems. But the most suitable game that can be introduced in Village or community forestry is Prisoners Dilemma. In this particular game one does better by defecting if every one else cooperate and one does best by defecting if every one else defect. In community forestry the role of third party is played by the Forest Department and turns the game into a Coordination Game. If both these games are analysed together then it can be easily realised that the length of the coordination game in community forestry is always longer than the prisoner's dilemma game. In many places forest department can be replaced by the village level institutions like Van Samiti but if any thing remains unsettled in the village level institutions regarding forest it comes to the forest department. In reality every one in village defect for their need and survival but if the forest department is removed from the central position, people will start defecting for their greed and improving their living standard by selling timbers from their own forest, forgetting their morals of forest for environment and rain.

In the absence of forest department the cooperation can still sustain if the future of the resource matter most to the village level institutions and make defectors value the future benefits more than the current benefits from defection. The retaliation strategy adopted by the village institutions must be credible which means that once a person defects it must be on the others interest to put the retaliation into effect. Lastly the benefit coming from cooperation in the future must themselves be sufficiently

probable to act as an incentive to cooperate in the present. The last factor mentioned should not be taken for granted in terms of time and step wise incentive. In a lay man's language it must be like money back policy provided by life insurance companies where risk coverage of life is the ultimate goal but returns money from time to time as an incentive for an individual to proceed forward.

In studies related to common property resource the group size has always provided a room for scepticism. As the member in the group starts increasing the cooperation becomes difficult where as moderated size groups are considered efficient. Changing group size will lead to the increase in the transaction cost of reaching agreement while reducing the burden borne by each participant for meeting joint cost such as guarding system and maintenance. If the group is big there asset will be more which can be used in time of emergency. Heterogeneity along many dimension including his asset, their information, their valuation of final products their production technologies, their time horizon, their exposure to risk as well as there cultural belief system in addition to their knowledge and acceptance to local common property regime is likely to do their undoing.

In the villages of Hazaribag District and Chatra District the people are divided on the basis of caste and religion. The small villages on an average having less than fifty houses are uniform in their religion and caste to a large extent as compared to larger villages of more than fifty houses. In larger villages different communities of different caste and religion live in different pockets within the boundary of the same village. Many of these communities have cultural and social differences. To a great extent forest in their locality has played a great role in keeping them united with mutual understanding of obeying the rules that have evolved over time. The villages present in these two districts are not recent in origin but are at least three generations old and have learned to live together in harmony. The population in these villages is almost constant with a growth rate of around 2.5 % annually. In my opinion, in spite of so many differences if the communities exist in harmony then the credit goes to the time factor and the social capital. Almost every adult knows the mukhia and adhyaksh by name and could tell their house. The people were very accurate about their information about anyone in the village and could easily tell when and where I can meet them.

The output of a common property resource is influenced by market forces. The increase in the commercial demand for the products of the common is a threat to the communal tenure. Traditionally the resources of the forest have been dependent on market exchange. Even today in many of the places the forest dependent population use to exchange their things which they think are of equal values. I mentioned earlier that that people are zealous to provide their labour and in many places for providing labour to any particular family they get food and rice beer in return. As development started taking place in India after independence it introduced a good market to all types of forest and village or community forest was one of easy opportunities to make money which was controlled to a great extent after Forest Conservation Act 1980. Economic transactions arise due to market failure and it can be linked to community forestry.

Another factor which plays a great role in the output of community forestry is inequality. Dayton-Johnson and Bardhand (2002) showed the relationship between inequality and economic efficiency to be U shaped. I agree to them in conditions of pure joint forest management which in my opinion is a true reserve forest of the present era of purely commercial purpose. The closer of the forest under joint forest management leads to the suffering of economically weak persons who depend on forest for daily living and find it difficult to wait for the time period required for harvest as compared to the economically stronger people. Nettings (1992) dimension of inequality prevails in Van Samiti in which the politically strong members of the committee bully the weak and get certain benefits in return. A good example of it is in my field work report of feeblest reporting his inability in protecting his entitlements.

In Van Samiti it's the collective responsibility of the members of the committee and the non members to check the proper utilization of village forest by each other. If any one defects, the committee is to be reported. It's the responsibility of the whole village to guard their forest and protect it from outsiders. The optimal collective management adopted by villagers are subjected to strategic manipulation. The implementation plan should go in hand with management adopted so as to cater all relevant information. Once a committee of Van Samiti comes into being in any village the forest department prepares its institutional framework but within it the

villagers decide their own rules for the common benefit of each other which the government has failed to consider so far. At this level a real prisoner's dilemma game goes on. It's generally spoken in villages that forest belongs to the government and felling of trees are liable to penalties or bribe to forest guards. Yet people steal timber from their forest for their requirement without getting penalised but the villagers penalise those who try to market them.

Conventional wisdom in much of the economies favours the establishment of defined private property rights in a resource as a way of reducing uncertainty and inducing individuals to husband carefully and to internalize externality. Privatization of common property resource may lead to distributional hazards and it's difficult to internalize every type of externality through privatization. Privatization of common property resource is seen as unfair by previous users who later respond to it notoriously. Nationalization of forests in many countries has taken place on grounds that local villagers could not manage it. Nationalization and its management by distant bureaucrats lead to inefficient government initiative. Further ineffective or corrupt government initiative depletes traditional control structure and leads to over exploitation by influential interest groups.

As long as the products in the forest lie without being collected it's a common property. Once the products are captured and piled even inside the forest it becomes a private property in the eyes of the villagers and no one except the owner has a claim on it. The area of forests irrespective of their type are divided among villages and dominated by the strength of the village. These are informal rules but they do leads to the privatization of forests apart from government initiatives to reserve it. At this level government is seen as an outsider and its rules for regulating the use of forest was definitely responded notoriously by the earlier users. The nationalization of forest in India took place on the grounds that the local villagers are unable to manage it but in eighties was realised the need of taking forest back to the people and now it has been realised that forests can only be protected if the villagers are directly involved in the management of their forest. Even the rights of the villagers in protected and reserve forest of Hazaribag District and Chatra District were protected by the Indian Forest Act 1927 it was rarely applied apart form it under Section 30(a) of it eleven species of trees Sakhua (*Shorea robusta*), Asan (*Terminalia tomentosa*), Mahua (*Madhuca*

indica), Paisar (*Pterocarpus marsupium*), Khair (*Acacia catechu*), Kusum (*Schleichera oleosa*), Palas (*Butea monosperma*), Aam (*Magnifera indica*), Kend (*Diosyros melanozylum*), Sesam and Harre (*Terminalia chebula*) got reserved in protected forest in 1964 which has not been de reserved so far leaving no option for the forest dependent population except to legally steal from the government forest.

The village forest acts like a private property for a group who have rights to exclude others from use and decision making. In the figure 1.2 presenting entitlement mapping in the chapter "Ownership of property" if is looked from the forest point of view in India and especially Jharkhand. In the figure the triangle below claims is inverted and indicates that strongest claim on forest is of the Government. The lesser right of control is with the State government and the least rights of access are with the members of the village forest. The minimal rights of influence are with those villages that do not have a forest of their own or are unable to dominate in any part of a forest. Unlike claim on forest the entitlements on forest increases as the right to claim decreases on forest. The State Government decides and makes rules on the protected forest of Jharkhand regarding collection of forest produce of commercial importance and through auctioning leases it to private contractors for example collection of Kendu leaves, Sarai and Khair. Earlier the private contractors were given timber license but these days the felling of trees for commercial purpose is not in practise. The money generated from these goes to the Central Government fund. According to the Indian Forest Act 1927 there should be rules made by the State Government regarding entitlements of the forest dependent population but at present it is not in practise for the difficulty of regulating it.

From my field work experience, the entitlements of the forest dependent population on the forest falls at the base of the entitlement triangle of the figure mentioned. The entitlements identified are (i) Fuel wood (ii) Cattle Grazing (iii) Wood for house Making (iv) Wood for agricultural implements and (v) Collection of Non Wood Forest Products. The mentioned entitlements are in the descending order of value. Fuel wood collection is the most important entitlement of forest dependent population. Wood for house making and agricultural purpose is not required every year. Collection of non wood forest products is seasonal and not the majority of the forest dependent population go for it except few villages. The chart of entitlements

shown in table 4.1 is based on my observation in twenty eight villages of Hazaribag District and Chatra District of Jharkhand. The grading has been done on ten point scale expressing percentage of population in a village accessing forest for the entitlement. For example in Ahari village total population depends on forest for fuel wood where as in Babau Ballia village only twenty percent of the population depends on forests for fuel wood. These entitlements at present are not taxed by the government in any form because of the difficulty associated in its regulation. In my opinion all these entitlements should be levied by Van Samiti and the part of the money should go the government. These taxes might be minimal in value but these transaction rules will clarify and reinforce different claims, property rights and relationship between all the individuals and the institutions involved.

Giving Van Samiti rights to levy will act as an individual or firm owning the forest and will lead to resource allocation in a more efficient way but private property rights requires specifying enforceable and appropriate contractual relation. Private contractual rights may break down pre existing cooperative mechanisms that have evolved among the beneficiaries of community forestry. The Van Samiti that exists in Jharkhand does not cover Section 85 of the Indian Forest Act 1927 and it's not a contract. The Van Samiti is a commitment of the forest population and the forest department to conserve forest and it has left untouched the existing cooperative mechanism of the forest dependent population in accessing their entitlements.

As the forest department is suffering from the lack of trained man power and the members of the Van Samiti lacks incentive to work efficiently. In my opinion the vacant vacancies in the forest department should be filled with forest committee members in rotation with nominal salary. These local villagers if trained properly and given responsibility will be able to perform better because of the local information they have. The salary from government will make them accountable and answerable. In most of the villages the adhyaksh and sachiv of the forest committee are selected by direct voting. This direct voting should be replaced by proper election along with panchyat elections.

Section 3: Inference

Scarcity of forest resources is an important characteristic which has led to the redistribution of rights over forest through involvement of varieties of institutions at different levels. Laws were passed in the historical course to define property rights over forests determining excludability at different levels. In spite of this many sections of different acts were not implemented properly or were taken for granted. All forests possess the characteristics of private properties and common properties, which enable us to understand the classification of forests as reserve forests, protected forests, village forest and private forests.

In the absence of well defined laws allocating property rights to the local villagers caused over exploitation of the forests. Further scarcity of forest resources led to the formation of Van Samiti to protect the forest near village. An effort was made by the villagers to protect forests in order to protect their entitlements of fuel wood, cattle grazing, wood for house making and agricultural implements, and collection of non wood forest products. To protect these entitlements informal rules or norms were applied. The externality generated by the absence of well defined laws rendering proper distribution of entitlements have been internalised through cooperative mechanism such as Van Samiti following the rules of the norms.

E N T I T L E M E N T S

	Fuel wood	Cattle Grazing	House Making	Agricultural purpose	Non wood Forest Produce (NWFP's)
V	Ahari	** ** *	** ** *	** ** *	** ** *
	Babu Ballia	**	** ** *	** ** *	** ** *
	Baje	** ** *	** ** *	** ** *	** ** *
I	Bariatu	** ** *	** ** *	** ** *	** ** *
	Bartuwa	** ** *	** ** *	** ** *	** ** *
	Bendi	** ** *	** ** *	** ** *	** ** *
L	Chal Chalaiya	** ** *	** ** *	** ** *	** ** *
	Chandol	**	** ** *	** ** *	*
	Chatro	** ** *	** ** *	** ** *	** ** *
L	Dari Atu	** ** *	** ** *	** ** *	** ** *
	Donai Kala	** ** *	** ** *	** ** *	** ** *
	Godhia	** ** *	** ** *	** ** *	** ** *
A	Gurhet	** ** *	** ** *	** ** *	** ** *
	Joradiha	** ** *	** ** *	** ** *	** ** *
	Kolhu	** ** *	** ** *	** ** *	** ** *
G	Kunda	**	** ** *	** ** *	**
	Kundru	** ** *	** ** *	** ** *	** ** *
	Lakhnu	** ** *	** ** *	** ** *	** ** *
E	Marha	** ** *	** ** *	** ** *	** ** *
	Narki	** ** *	** ** *	** ** *	** ** *
	Orparta	** ** *	** ** *	** ** *	** ** *
S	Pasaria	** ** *	** ** *	** ** *	** ** *
	Prevatari	** ** *	** ** *	** ** *	** ** *
	Satwahiya	** ** *	** ** *	** ** *	** ** *
	Sikri	** ** *	** ** *	** ** *	** ** *
	Sila	** ** *	** ** *	** ** *	** ** *
	Tillaya	** ** *	** ** *	** ** *	** ** *
	Torar	** ** *	** ** *	** ** *	** ** *

Table 4.1

CHAPTER 5

Norms of Community Forestry

Every day in our daily life we interact with so many people. Some are closely related through our family, some are related to us through our profession, some are related to us through our friends, some are related to us through our mutual interdependence, some are our acquaintances and rest are strangers to us. In each of the sphere of interaction that we have has its own importance in our daily life. The people close to us are difficult to be misunderstood because we understand each other that it becomes difficult to hide any thing. Longer the relationships, better we can tell about each other and better are the methods of conduct defined knowing the likes and dislikes of each other. Those who are not very closely related to us are the one with whom we can get closer or can step back. The conduct in this sphere is to reciprocate the same notes being spelled by the other. This is the sphere in which rewards and retaliation takes place. The outermost spheres in which we interact with strangers are based on our experience from the innermost spheres. Based on our previous experiences we judge strangers. If his response matchers our response from the innermost spheres then we accept the person as non strangers.

Life of a person starts at birth and ends at death. Between birth and death she/he tries to cross as many stages as possible. The centre point between life and death is supposed to be the marriage of a person. The cultural differences can be best studied by observing these three points. We almost live a life which looks similar to the rest of the people. Births and marriages are celebrated where as death is mourned all over the world. Many things in celebration and mourning are same while most of the things differ in different parts of the world. The participants in a joy of anyone has to show that she/he is also happy in others happiness where as participants in a sorrow has to mourn with the one in sorrow. We celebrate happiness to increase it and we mourn to reduce sorrow. Each person values different things in life depending on his need and desire. The things of desire and need give us happiness and when left unfulfilled, leaves us in resentment. We are ready to cooperate for things which brings

happiness and more when it can be equally cherished with those we like. Any one trying to invade the happiness is retaliated. If the invader is stronger, we need support of others to retaliate to protect happiness.

If any place in this world is randomly selected and observed then it won't be difficult to realise that all the houses build in that locality resembles each other more than houses from any other part. Well this might appear foolish as the construction depends on the availability of building materials and the economy of the locality. We all have our home and from our experience in our home we can understand others home. Our need is defined much by our biology and the type of profession we are in. In spite of all these limitations we exercise certain amount of freedom in the limited space we have. In every house there are certain things practised that differs from other houses. These differences can be seen in the way breakfast, lunch and supper is prepared and taken. Do the members of the family eat together in dining table or they like to eat watching their favourite television serials. How much freedom children are given to manage their own affairs. In every house there is a set of rules that exist. If we will come out in a locality we will find that much of the rules in every house of the locality are similar with slight differences. But these differences will be more than houses from other localities across the globe. The point I want to make is that in every society there are certain rules which are followed. By following rules a person makes him/her acceptable to the society to share his/her happiness and reduce his/her sorrow.

We all will not have a reason to disagree that we all want to make our life comfortable no matter where ever we might be and under every circumstances. If the discussion so far made is applied on the forest dependent population we will realise that the people who are dependent on forest are poor than those who are not directly related to forest. The good life and comfort are available in towns but it becomes expensive to afford all the comfort, so the poor don't have an option else to survive on country side where there ancestors have left land for them with ample amount of forest to supplement their living. In Jharkhand the forest dependent population live in their houses who's infra structure are from resources of forest. Each house has its own rules of conduct regarding division of work both inside house and outside house. The families are interdependent on each other for sharing their happiness derived from the

fulfilment of their needs and desire. To protect their joy and share it among villagers, the members of the village start practising certain rules that allows space for the residents to access their happiness and reduce their sorrow. These rules which are practised in a forest dependent population are the norms of community forestry. Those who follow these rules are rewarded in the form of respect and honour where as those who defect are penalised in the form of loss of reputation.

Section 1: Genesis of Forest Norms

In early days Jharkhand was a land covered with dense forest making it difficult for anyone to access. That was a time when it was dominated by wild animals and birds. For centuries it is believed to have been like this. It was in eleventh 11th century when different tribes marched in and spread all over it. In search of food and shelter the tribes were forced to move into a dense forest, might be because of their defeat in other part of India or because of a natural calamity. When the tribe marched in they got divided among each other over time and spread all over the plateau region of Jharkhand to create their dominance over a particular region for their need to hunt and cultivate in ample amount of forest to make their living. During those days villages were small and every one had a role to play in the community. There must be a standard size of village after which the members were getting divided among each other. Several of these villages use to select a leader of the region to implement the rules or norms for a peaceful living.

The region was tried to be invaded by Aryans for several times which was successfully resisted by tribes. Due to the resistance faced by tribes, the region remained untouched by Hindu influence. The Muslims penetrated Jharkhand in 1556 A. D. with arrival of Akbar in Delhi throne. Following Muslims, Hindus came in and the struggle for survival would have continued. Now Jharkhand was dominated by people of different races, religion and culture. The living pattern of people started changing slowly but still there was plenty to divide and settle, especially when the

leaders of the region had accepted the subordination of the strongest in Delhi. Those were the days in Jharkhand when people of different races used different pattern of agriculture. Some preferred settled agriculture where as other practised shifting cultivation. By this time the freedom of the tribes were curbed down to certain extent but no historian has reported negative affect of it on them.

With arrival of British in India things started changing fast. British found the forest in India as a source to fulfil their constant need in commercial scale. In order to maximize their benefit they looked for ways to break the relation existing between forest and the forest dwellers. The best way to implement was to change the ownership rights through privatization by means of reserving forest. The acts were passed on global standard whose credibility could not be doubted even now but were never implemented even after independence. During this time a lot of revolt took place in Jharkhand region of India and ownership on forest were defended on the basis of "first to use". The tribes in Jharkhand demanded their lands and forest on the basis of Khut Khatti (Khut Khatti relates to the clearing the forest for living and cultivation). It was after these revolt the British gave recognition to Khut Khatti system and gave property rights in the area been cleaned and the adjacent forests. It is said that the British were unable to dominate tribes in the forests of Jharkhand because of its high density making it difficult to penetrate.

With forest getting reserved under different categories the non tribal also started realising there freedom being curbed down in accessing forests they were used to. Prior independence forests in Jharkhand were controlled by zamindars under British purview. During those days the zamindar on request of villagers were allowing them to cut trees for their need. The rights earlier practised by the forest dwellers were curbed down but their needs from forest were getting fulfilled without much difficulty. This could be one possible reason for sections of Indian Forest Act 1927 related to protected forest not being implemented with sincerity as its necessity might not have been felt. One can compare the life prior independence to the present life to realise the need of forest and forest products to be more than that had ever been. If he/she still can't realise then he/she must be to any remote place in India and compare it with any town in India.

After independence scarcity of forest for forest dependent population was further increased by doubling the land under forest to be reserved under different categories. Land reform was introduced to take private forest from zamindars. As a result many of the forest were cut down by zamindars in Jharkhand before the implementation of land reform to reap the maximum from their forest. Now forests in Jharkhand were under the control of Forest Department. The British went back but the system they followed continued. Till few decades after independence of India, felling of trees were done by private contractors and the money generated were deposited in government fund. During British the need to provide rights to the forest dwellers might not have been implemented because of the ample amount of the resource present but after doubling the forest cover the need for the rights on forest came up. This need was never fulfilled up to the legitimacy of the forest dependent population. Those were the days when hunting was permitted in protected forest and many foreigners had been to Hazaribag for hunting. The need for protecting forest for ecological reasons was not a priority.

In the name of forest rights the need for fuel wood was considered. The forest department was practising coope system. Every year particular area in forest having mature trees were marked and felled down. The timber of commercial importance were taken by the contractors and the left over were distributed among villagers as fuel wood. In those days the need of wood for domestic and agricultural purpose were stolen from the forest of all kind. Selling of timber in local markets was a good source of income to the villagers. In those days the forest department and even government was not strict about protecting forest. Many of the old men whom I met during field work said negligence of the villagers as well as the carelessness of the forest guards in allowing people to cut trees more than required as a prime reason for the loss of forest cover.

After Independence the death rate decreased and the birth rate increased causing the population to grow faster than ever before. The force of population increased the pressure on forests and forest lands and depletion of forest took place at faster rate. In 1964 Hazaribag came into being as a separate district when eleven species of trees got reserved in protected forest leaving little room for the villagers to

fulfil their agricultural and domestic need. In spite of all these being done, stealing of wood from forest went on without much strict regulation. In Hazaribag no one remembers exactly when the forest rights of the villagers got recorded but people still remember their rights having over forest adjacent to their village with less specification. Many officers knew about it and many did not. Similarly the old men and women knew about it but the generation after them are not aware of it. The rights of the village are documented in the Khatiyani Part II. The Khatiyani Part II of a village having forest gives an excellent example of the bundles of right. The most generalised form of Khatiyani Part II describes rights of different villages on a particular forest. The village having forest or adjacent to the forest has maximum rights over it. It's the responsibility of the village to check trespass.

The village having maximum rights are permitted to bring wood from forest for fuel wood, wood for house making and agricultural purpose. They can send their cattle to graze in it and are the first to claim for non wood forest products (NWFP). A village far from the forest are allowed to take fuel wood and non wood forest products. These far villages have rights to take their cattle to graze in the forest. Their need of house making and agricultural purpose are to be met from the forest but with permission from the forest department. The villages farthest from the forest have minimal rights over forest such as cattle grazing and fuel wood collection. None of the village I had been in my field work could exactly tell their rights according to Khatiyani Part II but were able to locate the forest as Khatiyani Forest. The villages of my field work did not have a copy of Khatiyani Part II. Even in the forest office at Hazaribag the staffs had to struggle a lot in searching a copy of Khatiyani Part II. From discussions with Indian Forest Services (I.F.S) officers of different level in Hazaribag District and Chatra District, the impossibility of regulating rights mentioned in Khatiyani Part II became apparent. The practical problem in regulating the rights as mentioned in Khatiyani Part II might have led in the decline of its practise.

The state government of Jharkhand then part of Bihar reserved the forest after independence for thirty years. During this period by reserving trees in protected forest the consideration for forest dependent population was ad versed. Whatever legal rights they had on forest was left over from coope felling. Before the term of thirty

years got over, two other acts, The Wild Life (protection) Act, 1972 and Forest Conservation Act 1980 came, strengthening the Central Government to regulate. For first time step were taken to conserve forest for environmental reason. As the Central Government became stronger it started to regulate it strongly and punishments were increased for those who breached. Many things can be learned from Bolly Wood movies as during late seventies and early eighties many movies were made on conservation of wild life and forest.

In early eighties the coope system under the supervision of forest department was stopped whose reasons are not very clear but might be because of environmental reason. With the stoppage of coope cutting the minimum legal rights that the forest dependent population had on forest got impeded. This time is also important from the Forest Department point of views. The State Government stopped the recruitment of third and fourth grade staffs. As the commercial felling of trees came to an end the State Government did not feel the importance of recruiting forest guards even for the conservation of forest and wild life. The time passed by, technology changed, knowledge of conservation changed but the department remained suffering with the lack of trained man power both in office and in field. Most of the IFS officers agree to the termination of coope system as the greatest blunder committed by the forest department.

The condition kept on getting worse with decreased man power in the department while the movement of C. P. I. Maoist extremists in nineties started getting rooted over the woods of Jharkhand. In between all these the lives of the forest dependent population started getting affected. The stealing of timber from forests went on increasing and the sense of insecurity started developing in the people who were close to the forest. They thought that if they will not take an initiative to protect there forest on which they depend then it will get difficult for them to survive. As a result the villagers living near forests started dominating on the forests nearing their village or in the forest that was located in the map of the village. Who ever faced the objection started objecting others on the same ground and the chain went on. Soon the presence of outsiders in a forest was sensed as threat. The informal rules for the conduct of outsiders were evolving in the nineties.

The trace of many informal rules can be searched in the history which are sometimes difficult to be explained. Women going to the forest for the collection of fuel wood and men cutting trees are more a norm than a law. Similarly prohibition on women to plough, repairing roof of a house and carrying thing on head are norms rather than taboos. It's interesting to note that these acts are not only of tribal but transact across race and religion in Jharkhand. Many authors like Jewitt and Kumar (2004) have described epitomizing of women by developmental projects as a custodian of environment but according to my field experience the women are a threat to forest. Feeding of children before adults is also a norm. But here I have restricted my discussion on norms that are in practise in community forestry.

With a motivation to protect forest the villagers started to keep an eye over their forest. Increase in theft was countered by regular guarding. Those who were caught stealing started facing severe punishment like beatings in addition to public shame like asking for forgiveness from whole village and doing sit-ups by holding their ears. During the initiation of these informal rules there were opposition in the beginning but gradually it started getting internalised. In many of the village collection of fuel wood and grazing of cattle by outsiders are permitted where as in rest only cattle grazing is permitted. The point I would like to emphasize is that if a village has plenty they don't mind sharing but the sharing also depends on their relation with other villages in past. Another important point is the utility of the forest product to the villagers. If the product is expensive and the local villagers are interested in it they prohibit others but if they don't value they don't mind it being taken away.

Villagers also devised rules for themselves. Anybody needing wood from forest had to take permission from the village level protection committee. In the beginning it worked well but slowly people started following their previous practise but a change was seen. Those who were cutting trees as per their requirements did not face any problem but those cutting more then their requirement were criticized. Strongest actions were taken against those who tried to supply timber to local markets. When a member of a village is found cutting trees more than he need, may be for

market supply, no legal action is taken against him but he is made to pay fine decided by Van Samiti. Those from nearing village if caught are made to do sit-ups by holding their ears in front of the village in addition to the fine decided. When a stranger is caught he is beaten first and then handed over to forest department.

In last ten to fifteen years the activities of C. P. I. Maoist extremist has increased a lot in Hazaribag District and Chatra District having their wing in each village in the form of Kranfikari Kissan Committee (K.K.C). The demands of K.K.C. are related to land rights over which they plough. The extremist have several members in their battalion and are under their Area Commander. The Area commanders are under Sub Zonal Commander and Zonal Commander. The Area Commander stays in field for few months in a year and rest of the time they live in metropolitan cities converting their black money into white through business. At present the local involvement in the extremist group is considered to be 20 percent. The extremist survive on levy collected from the local contractors and robbery. They set their own court and do justice for the injustice faced by the people of the village. Who ever in the village try to go against their rules of conduct are gunned down. They don't interfere with village life unless it matters to their security. My field work in the villages of Chatra District got much delayed because of the tense situation in some of its part where extremist were present in the village surrounded by men of Central Reserve Police Force and Jharkhand Police, ready to ambush. The extremist play an important role in the access of forest rights of villagers. Many time people going to the forest for the collection of fuel wood or timber requirements are beaten in the name of destroying forest and many times on payment of levy they permit tractors of timber to be carried away. Chatra District had a good cover of Khair but because of overexploitation permitted by extremists has brought it to the level of extinction.

With these entire problems the village level institutions perform and try to proceed forward by stopping those whom they can stop and leaving those who cannot be controlled. I will summarise the norms of community forestry as (1) The village take the collective responsibility of guarding the forest they dominate from felling of trees by outsiders (2) The members of a village do not object each other for the legitimate need of timber for house and agricultural purpose (3) The members of a

village are free to access forest for collecting non wood forest products (NWFP's), with the principal of "first to use" (4) The cattle of the village can graze in their forest as well as on others forest (5) People from nearby villages good in terms with the village can come for collecting fuel woods only and send their cattle for grazing (6) Villagers from far off villages are not allowed to collect fuel wood (7) The members of the village having forest do not accept each other felling trees for market purpose (8) accessing others forest for forest produce is an offence, and (9) Outsiders to the village are denied poaching in a village forest.

With the formation of Jharkhand as a separate state, the Department of Forest and Environment tried to institutionalize these village level committees in the form of Van Samiti or forest development agency (F.D.A) for protecting the forest under the assurance of ninety percent share of the village on total harvest after fulfilling the timber requirement of the villagers. So far not a single Van Samiti has got its promise fulfilled. The problems faced by the forest department as expressed are (i) education among villagers (ii) lack of trained man power in the department (iii) lack of fund (iv) lack of infrastructure (v) problem of extremism, and (vi) views on Van Samiti and joint forest management (J.F.M) among villagers differs with subsistence level. To over come all these the Department of Forest and Environment is trying to build trust by distributing solar lamps in villages without electricity, first aid box, build roads and school buildings in the village, dug ponds, provided wells and tube wells in the village even when a separate department is made by the Government of India to provide water facilities. A note which I would like to play from my field work experience is the presence of forest department in the remotest of the village of Hazaribag Distict and Chatra District of Jharkhand, following it came the education department and the rest are far behind.

The movement of forest department in the direction of Van Samiti and forest development agency is a joint effort to protect forest. It still does not clarify the rights of the forest dependent population on their forest instead the norms mentioned above are in practise among the villagers. A question left unanswered is where the source of these norms lies. A suggestive answer from my side is the registration of forest rights

in the Khatiyani Part II, which the forest department seems to forget, which the villagers seem to forget but which has institutionalized itself in due course of time. If such is the case then on what basis those rights were registered in Khatiyani Part II during registration. Has the changes in the past produced a change now, what were the possible changes?

Several claims on the origin of the norms are made. The most accepted view is to enhance the welfare of the members of the group that accept and practise them. In such groups the distribution of power is broad and information regulating informal control passes easily among the members. The members here are repeated players and not mere acquaintances. Social norms are function of actor's environment and it shapes actors intrinsic predisposition. Two defining elements in defining a norm are occupation and geography. Most of the new norm scholars believe that the norms are grounded in the concept of property. The binding element in abiding a norm is the fear of being sanctioned. Norms arise from the internalization of accepted standard of behaviour. Those who internalize norms willingly bear a moderate cost of enforcement against each other. Internalization is a remarkable process through which imposed obligation becomes desire. Norms get hone by gossiping like the way law gets hone by judicial decision making.

Rational norms are function of time and arise out of experience. The sources of norms are remote in time, they passes from one generation to another deriving authority by virtue of being in part of tradition rather reflecting deliberation. Publicly people endorse existing norms even if they don't approve personally. The probability of a norm being criticized is more when individual value the change in the norm more than sanctioning. If complete information would have been available the existence of norms would have been a myth. An appeal for repealing a norm is generally claimed by members who benefit most from it to prove their loyalty to the group. Consequently those who gain less from norm repeal are considered as genuine advocates. Overtime realization comes that certain modification in conventional traditions bring efficiency leading the approval of new rules, as more people starts acknowledging its efficiency.

I don't find a reason to disagree with any of the claims made except to elucidate on them. When we talk of forest dependent population the geography and occupation gets defined. The villages of Hazaribag District and Chatra District exist as a close knit society where division of power is broad as people of different race and religion live in different tolas of the same village for at least three generations and take the collective responsibility in defending their forest in which they have maintained their dominance. These people have lived in same place for considerable amount of time and are scheduled to live there for considerable future time. The norms of community forestry has been internalised to a certain extent that young generations are not able to explain the reason for doing so but they practise it. Because of fear of being sanctioned people willingly avoid trespassing others forest. Many times when people can't prove their legitimate need they violate norms and steal from their own forest without being caught by others.

The extremist present in the woods of Jarkhand gain most from illegal use of forest so they stop people from their legitimate need under the blame of forest damage but practise the opposite to gain levy. There is no doubt that the norms of community forestry have passed from one generation to another. A fact clearly visible in my study regarding development of forest norms is the changes in the property rights in forest. As the scarcity of the forest resources was felt from past to present in relation to the practise practised for survival the steps were taken to move a step forward in the ownership spectrum towards full blooded ownership through means of informal norms. Even in Shasta country that Ellickson mentioned in his revolutionary book "Order Without Law" where crops damaged by cattle were repaid by the cattle owner in kind, circled around the understanding of property. The damages which could be repaid were solved through informal laws of norms whereas where just damages could not be paid by informal norms was taken to the court of law. As far as norms in community forestry are considered is the outcome of respective changes in the property rights of the villagers in their community forestry.

Section 2: Forest Norms and Forest Laws

Norms and laws both serve as the corner stone of social order. Law complete as well as substitute norms. The glue that brings order in society does not come from law enforcement but from informal enforcement of social mores by acquaintances, bystanders, trading partner and others. Efficient laws survive over time while inefficient law are made to fade out with repeated litigation. Similarly efficient norms evolve over time and inefficient norms dies over time. The problem which arises is that the inefficient laws giving space for opportunistic behaviour are never litigated where as efficient laws are repeatedly litigated. Contrarily, inefficient norms giving space for opportunistic behaviour are advocated by those who benefit most from it. Law and norms goes hand in hand but in close knit societies like villages of Hazaribag District and Chatra District, the Forest Laws are exterior to village.

Basu believes that there is no society in the world where stealing is considered legitimate. In villages of Hazaribag District and Chatra District stealing is not a shame when you steal something from government's property. A good example though not directly related to my work is stealing of electricity. The villages nearing town have electricity. Few of the house have electric meter where as majority of them don't have but every one uses electricity. When Electricity Department raids any village the message gets circulated in the village like a chain reaction and every thing that runs on electricity are hid. These villages are deprived of electricity during the time of need. When villagers go to bed the Electricity department provide electricity and by the time they wake up the electricity is again cut. They get electricity for few hours in the second half of the day. The reason for doing so is that in these villages' people cook food on electric heater and the department had to suffer repeated loss of electric transformers. The reason I cote this example is to explain its similarity with forest.

During field work where ever I went I asked a common question to villagers; who owns the forest that you use? The majority of the correspondent said, forests are the property of Government. Few claimed that the forest belongs to them. I questioned my self about Guha's and Corbridge's experience of forest people

rebellious against forest getting reserved. At first I thought that with passing of time the forest dependent population has accepted forests as property of government. With repeated interaction with similar people in different village I understood that the villagers have learnt to mimic forest as a property of government. Even the oldest of the village speaking of protecting forest for environment for it bring rain and increase harvest forced me to doubt on their motives. There might be a time when these directed behaviour will result into a norm but if it gets delayed there will not be a forest left. These villagers claiming forest as a property of government because of the incentives they get from the forest department. When I was doing field work few were interested in discussing about forest related issue but when I asked them about things provided by forest department they got interested. It's true that the villagers took their own initiative to protect forest not for environmental reasons but with the fear of insecurity, threat of outsiders taking their forest which they believe to have rights over them.

Both, the forest dependent population and the forest guards working in field suffer with lack of knowledge and appropriate information. Though the forest dependent population in Jharkhand never got their rights legally but they have been franchising it. The rights of the villagers are mentioned in Khatiyani Part II but it could never be implemented for its associated problem of regulation. The unawareness of the villagers has given incentive to many forest staffs to behave opportunistically. It's a common criticism in academic literature of people being punished for bringing fuel wood and grazing cattle in forest for it sounds as a strong defence of criticism but none have turned back to answer why? The atrocities faced by villagers from the forest department people have rooted deep and forest department people are seen as threat to their freedom. Still many from the forest department believe that the punishments should be made more severe. In Jharkhand the violation of Section 26 and Section 33 is punishable with imprisonment for a minimum term of six months which may extend to two years or with minimum fine of one thousand rupees which may extend to five thousand rupees or with both or with such compensation as the convincing Court may direct to be paid. The offence under these sections are cognizable and non-bailable.

The violation of Section 26 and Section 33 of the Indian Forest Act 1927 are litigated in Civil Court. Violation of section 52 of the Indian Forest Act 1927 regarding seizure of property liable to confiscation, and Bihar Public Land Encroachment is resolved by forest officers not below the rank of District Forest Officer. All other violations are pleaded in Criminal Court. Out of all, most litigated case in Hazaribag District and Chatra District are related to land and illegal mining in forest land. In the beginning I thought that the most litigated case would be related to Section 26 and Section 33 of the Indian Forest Act 1927 as can be related close to the livelihood issue. In practice most of the cases under Section 26 and Section 33 if not having criminal offence or grave negligence are resolved by District Forest Officer in terms of monetary fines and cases are dismissed. Land encroachment and illegal mining are litigated here because it cost a lot to the Forest Department and benefits a lot the violators. The encroachment on forest land is mainly done for cultivation. The illegal mining practised in forest land does an irreparable damage to the forest.

During field work I asked the forest dependent people about any kind of objection they face in accessing forest by forest department people. The common answer was no, guards comes in an interval of about fifteen days to a village for a round. If guards visit in an interval of fifteen days then there is no question of objection by forest department. If such is the case, then who are the people being caught under Section 26 and Section 33. Many in the villages seem to understand that it's an offence to lead cattle where saplings have been planted. People do understand that they are stealing wood from the protected forest and claim to each other that they have a right to do so. The reality is that most of the forest dependent people neither accept forest as government property nor as their own property but as a common property with little incentive to contribute.

In an experiment it has been concluded that if there are fifty mature trees in a locality it can provide fifty sacks of fuel in a month without using an axe. These mature trees shed their dry branches in a month's time whose volume is equivalent to fifty big sacks of rice. This experiment is highly in coordination with the statements given by the villagers nearing Hazaribag Wild Life Santury. Most of the villagers

caught under Section 26 and Section 33 are found to be careless users of the forest. These careless or ignorant people deliberately lead their cattle in the plantation zone, and cut young growing trees for they are easy to be carried away. Women in the village take the liberty of being women and seduce forest by chopping coppicing plants for fuel wood. Most of the staffs in the forest department are male especially those who go to the field. To anyone's surprise when these women are caught by forest department people they refuse to mention their name and the case is registered and pleaded on her husband's name.

These negative externalities are being tried to remove by forest department through various training programme and spreading common goals. Some of the conscious people have tried to regulate it through traditions and culture like Raksha Bandhan, and planting trees for daughter's marriage. In most of the villages where I had been people joined hands with the forest department for the formation of Van Samiti in the hope of direct benefits. When these benefits were not direct the committee members start loosing interest. The forest committees in different villages seek financial aid in delivering their service. In a heated discussion of mine with an I.F.S. officer in Chatra District he said why should the government provide money to the committees, its there forest. The villagers in my division are able to sustain there life for eight to nine months through various forest produce and rest we are trying to provide them through involvement in National Rural Employment Guarantee Act (NREGA) works, in plantation, road making, construction of ponds and check dams, and repair of old wells. Every one live in the hope of future and deposit money in bank, form families then why cant people wait to get their returns after the trees get mature, he defended. Sal takes about ninety years to get mature while others take on an average forty years. In spite of this the planted forest does not have the capacity to coppice and is vulnerable to exploitation. If natural forests are cut they recuperate fast if protected but not the planted forest.

The externality of fiscal deficiency is internalized through employment in NREGA through forest department. This internalization process has another dimension. When ever work starts in most of the area, demand for levy or termination of work is forced by the extremist groups. Consequently the progress of work comes to halt. Again after few months work is continued till further objections are put. In

this way three months work is extended for months. So far in the villages of Hazaribag District and Chatra District few of the villagers have benefited from NREGA. In local newspaper corruptions are reported and attempts of suicide have been taken. Some of this news has been the headline of national newspapers. When I discussed the problem of militancy with the Superintendent of Police, Hazaribag, Mr. Praveen Kumar, he asked me about my observation. I replied I have been to several interior villages and asked about the problem faced due to extremism. The most common answer I got is that they don't face any problem. Praveen replied this is the problem that we face; villagers have stopped practising social boycott. I realised, extreme form of sanctioning a norm violator is ostracism but it fails when the violator is stronger than the third party or does not value the third party.

How do the norms of community forestry interact with the existing law? Do these norms complement the existing law or do they substitute law? The rights of the forest dependent population should have been according to section 11, 12,13,14,15 and 30 (b) of the Indian Forest Act 1927 but these rights were never legally enforced in Jharkhand. But the violator of section 26, 33 and 52 were penalised. Even though the rights of the village were mentioned in Khatiyani Part II could never be regulated. The forests in Hazaribag District and Chatra District were reserved mostly as protected forest before the formation of these districts as separate district. Reserving eleven species of trees in Hazaribag District with its formation in 1964 ad versed the situation. These eleven species of trees reserved make more than eighty percent of the forest, with Sal alone constituting fifty five percent.

According to the Indian Forest Act 1927 a forest can be reserved as protected forest for a maximum period of thirty years. If the forests in Hazaribag were reserved as protected forest in 1952, the term of thirty years has expired on 1982. If a forest does not remain reserved as protected forest any tree in it can not be reserved. Hence the reservation of trees in Hazaribag also expired on 1982. In 1980, Forest Conservation Act came and it failed to address the problem. Where as tribal people living in forest for generations whose rights were not recorded became illegal residents of the forest. The schedule Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 did not speak of cases pending against the

violation of Forest Conservation Act 1980. It talks of recognition of forest rights but not of how to regulate it. Sub-section 6 of section 4 of The Schedule Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 will take away the land of forest dweller if in excess of four hectare in which they have been practising there traditional rights.

What ever might be the state of law apart from land related issues the forest dependent population in Hazaribag District and Chatra District have been franchising there entitlements on community forest. These people profess on protection of forest for legitimate reason but steal from forest. Just like every one speaks good but don't turn them in their behaviour. According to the maturity that I have attained in community forestry and existing laws and norms the forest dependent population franchise their rights legally over forest, many times thinking that they are stealing. Forest Department on other hand pretends that they won't tolerate felling of trees by the forest dependent population. Many time bribes are taken by the forest department people to compromise the case at least in the lower level. This might sound incredible but it's true. With present infrastructure the Forest Department is having, it's impossible for them to protect forest. It's difficult at this point to talk about the rights of the forest dwellers and the duties of the forest officers. The relationship between the two is balanced by a myth which could be utilized either in positive direction for the benefit of all or in negative direction for the temporary benefit of few and ever lasting disaster for all.

Section 3: Analysis of Forest Norms

Forest norms being practiced in the community forestry of Hazaribag District and Chatra District of Jharkhand are made to enhance welfare of the village. These norms have evolved over time and withhold the villages in which it is practised, by bringing stability to the community. The villagers abide with norms for the fear of being penalised by the third party. The most common methods of sanctioning is negative gossip, loss of reputation and in extreme form ostracism. To generate shame the forest norm violators are made to do sit ups by holding their ears in front of the whole village in addition to fines amounting Rs. 150 to Rs. 200. When a norm

violator is an acquaintance he is embarrassed in front of the whole village where as strangers have to face more serious punishments like beatings.

The norms of community forestry have evolved over time to informally regulate the entitlements of the villagers on community forestry. These norms have been internalised by the members of the community forestry and are enforced with a self administered feeling of pride and violated with a self administrated feeling of guilt. The members of the community forestry publicly acknowledge the forest norms and take the collective responsibility of enforcing towards each other. Forest norms have evolved in accordance with entitlements in community forestry as a refuge of entitlements. Changes in the respective rights over forest changes norms.

Conclusion

Forests are inseparable part of rural life in Jharkhand. The life, culture and festivals of the people in Jharkhand give a lot of importance to forests. Jharkhand is a tribal state with less than twenty seven percent of tribal of the total population. Earlier these forests were as an open access resource where no one could be excluded from it. The tribal came to this land of plateau covered with tropical moist Sal forest in eleventh century. Many time Aryans tried to invade this land but was left untouched till the time Akbar came in the Delhi Throne and for the first time Muslim influence entered the region followed by Hindu population. British came to India and started using Forests of India as inexhaustible resource. For a constant supply of timber for their purpose they reserved the forest under categories,

The reservations of forests under different categories are reserve forest, protected forests, village forests and private forest. Mentioned categories of forests are best understood in the light of economic theory of property. In these forests the rights of many villages were recorded in Khatiyah Part II. The laws were given by British government providing ample amount of space for the fulfillments of the social and cultural need of the people. Prior independence the felling of trees were done by private contractors under the purview of zamindars and the rights of local people according to the Indian Forest Act 1927 were not in application in Jharkhand. After independence the forest cover of India was doubled taking private forests away from the hands of the zamindars. Even after independence those rights formally mentioned in the Indian Forest Act 1927 bestowing cultural, social and economic rights over forests to the local villagers were neglected.

The forests in Hazaribag District and Chatra District of Jharkhand are mostly protected forest which could be reserved by the state government for a term not exceeding thirty years. Before this term could get over in most part of Jharkhand, Forest Conservation Act 1980 came into being to counter loss of forest from developmental projects making many of the traditional forest dwellers as illegal residents in the forest. In the name of rights the local villagers had the left over from the coope felling. With the termination of coope system the minimal rights of the forest population in Jharkhand got obliterated. The extinction of coope system n Jharkhand rendered the recruitment of third and fourth grade staff in the forest department which increased the theft of woods from forests for various purpose. In late eighties need to fulfill the bio mass need of forest dependent population was given priority above commercial felling and a move to involve local people in the management of forest was felt.

The villagers who have been residing around forest land to supplement their need felt the need to protect their forests to protect their life. This sense of insecurity allowed cooperation among the villagers to produce the joint effort resulting in Van Samiti. With the coming of Jharkhand as a separate state these evolving institutions have been tried to be provided with institutional framework through the joint effort of forest department and Government of Jharkhand. The institutions of Van Samiti have come up to internalize the externality generated through fuzzy entitlements provided by the improper implementation of the existing laws in assigning forest rights to the one who value it most. These Van Samiti use norms as a rule of conduct to protect their entitlements and punish violators. The norms practiced in community forestry have evolved along entitlements as a means to defend entitlements leading to the welfare of the community that practice it. The balance between the entitlements and the norms is in a precarious position and may not be able to mitigate the increasing pressure on forests by different interest groups. Hence laws based on these norms should be implemented to bring stability to the norms along with clearly defined property rights over forests.

Recommendations

- *Recruitment of third and fourth grade staffs in forest department with proper training. For field job local people must be recruited as they have better knowledge and information of the region*
- *The members of the committee of Van Samiti should get nominal salary as incentive to make them accountable and answerable.*
- *The members of the Van Samit especially adhyaksh and sachiv should be elected through proper voting along with panchayat elections.*
- *Van Samiti should tax all the beneficiary of the community forestry and fix quotas for the resource flow unit. Tax will clarify and reinforce different claims and property rights, and quotas will control the overexploitation of the resources.*
- *The relationship between forest department and forest committee should be strengthened by the formation of motivational wing in forest department to reinvigorate both the forest department people and the forest people.*
- *Van Samiti or Forest development Agency should operate in association with other institutions like panchayts, mahila samiti etc. as a particular set of mutual best response is virtually universal over an extended period of time if it constitutes one or more institutions.*
- *The norms of the community forestry in Jharkhand are efficient as it assigns rights to those who vale it most. These norms must be stabilized by laws at least at district level.*
- *Training programs should be organized to teach villagers on the method of extraction of resources from forests without damaging the forests.*

Reference:

Agarwal, A. (2000), 'Small is Beautiful But Large Better? Forest Management Institutions in Kumaon Himalaya, India' in *People and Forests: Communities, Institutions, and Governance*, ed. Clark Gibson, Margaret McKean, and Elinor Ostrom. Cambridge, M.A.: MIT Press.

Agarwal, B. (1998), 'Environment Management, Equity and Ecofeminism: Debating India's Experience', *Journal of Peasants Studies*, 25 (4): 55-95

Agarwal, B. (1997b), 'Environmental Action, Gender equity and Women's Participation', *Development and Change*, 28: 1-44.

Anderson, R. S. and W. Huber (1988), *The Hour of the Fox: Tropical Forests, the World Bank and Indigenous People of Central India*, Seattle: University of Washington Press.

Anupam, (2002), 'Income from Minor Forest Produce - A case study of Hazaribag Wildlife Sanctuary', Project Work of M.Sc. Forestry, *Guru Ghasidas University - Bilaspur*

Aronson, E. (1980), '*The Social Animal*', San Francisco: W.H Freeman.

Axelrod, R. (1986), 'An Evolutionary Approach Norms', *American Political Science Review* 80: 1095-1111.

————— (1984), '*The Evolution of Cooperation*' New York: Basic Books

Bailey, F. (1961), "'Tribe" and "Caste" in Indian Sociology', *Contribution to Indian Sociology*, 5 (1): 7-19.

Baland, J. M. and J. P. Platteau (1999), 'The Ambiguous Impact of Inequality in Local Resource Management' *World Development*, 27: 773-778.

Bardhan, P. (1993), 'Analytics of the Institutions of Informal Cooperation in Rural Development', *World Development*, 21(4): 635-39

Basu, K. (1998), 'The New Palgrave Dictionary of Economics and the Law', Palgrave Macmillan.

Beteille, A. (1974), *Six Essays in Comparative Sociology*, Delhi: Oxford University Press.

Bolomquist, W. and E. Ostrom (1985), 'Institutional Capacity and the Resolution of Commons Dillema' *Policy Studies Review*, 5: 383-93.

Borgoyary, M. (2001), 'India's Commitment to International Treaties on Sustainable Forest Management: A Brief Review from the Perspective Participatory Forest Management', *Inform*, 2 (1): 6-9. New Delhi: Winrock International India.

- Buckle, S. (1991), *'Natural Law and the Theory of Property: Grotius to Hume'* Oxford: Oxford University Press.
- Cheung, S. (1970), 'The Structure of the Contract and the Theory of a Non-Exclusive Resource', *Journal of Law and Economics*. 13: 45-70
- Coase, R. H. (1960), 'The Problem of Social Cost' *Journal of Law and Economics*, 3: 1-44.
- Coleman, J. S. (1990) *Foundations of Social Theory*, Cambridge, MA: *Harvard University Press*.
- Cooter, R. (2000), 'Do Good Laws Make Good Citizens? An Economic Analysis of Internalized Norms', *Virginia Law Review*, 86
- (1996), 'Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant', *University of Pennsylvania Law Review*, 144(5): 1643-1662.
- (1995), 'Law and Unified Social Theory' *Journal of Law & Society*, 22(1): 50-67.
- (1993), 'Against Legal Centricism', *California Law Review*, 81:426-27.
- Cooter, R. and T. Ulen (1994), *Law and Economics*, United States, Addison- Wesley Educational Publishers Inc.
- Corbridge, S. (2004), 'The Ideology of Tribal Economy and Society, Politics in Jharkhand, C. 1950-1980'. in *Jharkhand: Environment, Development, Ethnicity*. Delhi, Oxford University Press.
- Corbridge, S. (1991), 'Ousting Singbonga: The Struggle for India's Jharkhand' in C. Dixon and M.J. Heffernan (eds), *Colonialism and Development in Contemporary World*, London: Mansell, 153-82 Reprinted (1993) in P. Robb (ed.), *Dalit Movement and the Meaning of Labour in India*, Delhi, Oxford University Press, 153-82.
- Corbridge, S. and S. Jewitt (1997), 'From Forest Struggle to Forest Citizens? Joint Forest Management in the Unique Woods of the Jharkhand', *Environment and Planning A*, 29 (12): 2145-2146.
- Corbridge, S. and S. Kumar (2004), 'Community, Corruption, Landscape: Tales from Tree Trade' in *Jharkhand: Environment, Development, Ethnicity*. Delhi, Oxford University Press.
- Corbridge, S., S. Jewitt, S. Kumar, A. Mahapatra, and P. Mitchell (1999), *Availability, Consumption, Marketing and Management of Non-Timber Forest Products in Eastern India*, London: Department of International Development, NRSP Programme.

- Dayton, J. and P. Bardhan (2002), 'Inequality and Conversation on the Local Commons: A Theoretical Exercise', *The Economic Journal*, 112 (481): 577-602.
- Demsetz, H. (1967), 'Towards a Theory of Property of Rights', *American Economic Review* 57(2): 347-59.
- Devereux, S. (1996), '*Fuzzy Entitlements and Common Property Resources: Struggles Over Rights to Communal Land in Namibia*' Institute of Development Studies, Working Paper 44.
- Donahue, C. Jr, 'The Future of the Concept of Property Predicted from its Past' in *NOMOS XXII* 28 (58).
- Durkheim, E. (1972) *Selected Writing*, ed. Anthony Giddens. Cambridge: Cambridge University Press.
- Ellickson, R. C. (1998), 'Social Norms, Social Meaning, and the Economic', *The Journal of Legal Studies*, 27(2): 537-552.
- (1991), '*Order without Law: How Neighbour Settle Dispute*' Harvard University Press.
- Elwin, H. V. H. (1936), *Leaves from the Jungle. Life in Gond Village*, London: John Murray.
- Etzioni, A. (2000), 'Social Norms: Internalization, Persuasion, and History', *Law & Society Review*, 34(1): 157-178.
- Farber, D.A. and Frickey, P.P. (1991). *Law and public choice*. Chicago: *University of Chicago Press*
- Gadgil, M. (1983), *Forestry with a Social Purpose, Towards a New Forest Policy. Peoples' Rights and Environmental Needs*. 111-134.
- Goodman, J. C. (1978), 'An Economic Theory of Evolution of Common Law', *Journal of Legal Studies*, 7: 393-394.
- Gordon, H. S. (1954), 'The Economic Theory of common Property Resources', *Journal of Political Economy*, 62(2): 124-42
- Grossi, (1981) cross-reference, Ostrom, E. (2000), '*Private and Common Property Rights*' Arthur F. Bentley Professor of Political Science: Co-Director, Workshop in Political Theory and Political Analysis, and Centre for the Study of Institutions, Population, and Environmental Change, Indiana University.
- Guha, R. (1983), *Forestry in British and Post British India. A Historical Analysis*. *Economic and Political Weekly*, November, 1940-1947.

- Hardin, G. (1968), 'The Tragedy of Commons', *Science* 162: 1243-48.
- Hardin, R. (2000), 'Law and Social Norms in the Large', Symposium: The Legal Construction of Norms. (Nov.2000), *Virginia Law Review*, 86 (8):1821-1837.
- Hart, H. L. A. (1961), *The Concept of Law* Oxford: Clarendon Press.
- Harris, J. W. (1996), *Property and Justice*, Oxford: Oxford University Press.
- Hart, H.L.A (1977), *Essays in Jurisprudence and Philosophy* Oxford: Oxford University Press.
- Heller, M. A. (1999), 'The Boundaries of Private Property', *The Yale Law Journal*, 108 (6) 1163-1223
- Hodge, I. (1995), *Environmental Economics*, London, Macmillan.
- Honore, A. M. (1961), 'Ownership' in A.G. Guest, ed. *Oxford Essay in Jurisprudence*, Oxford; Oxford University Press.
- Jackson, C. (1994), 'Gender Analysis and Environmentalism', in M. Redclift and T. Benton (eds) (1994), *Social Theory and Global Environment*, London: Routledge.
- Jewitt, S. (1995a), 'Europe's Others? Forestry Policy and Practises in Colonial and Postcolonial India', *Environment and Planning D: Society and Space*, 13: 67-90.
- Jewitt, S. (1995), 'Special Paper: Voluntary and 'Official' Forest Protection Committees in Bihar: Solution to India's Deforesratjon? *Journal of Biogeography*, 22 (6) - 1003-1021.
- Jewitt, S. (2000a), 'Mothering Earth? Gender and Environmental Protection in Jharkhand, India', *Journal of Peasants Studies*, 27: 94-131.
- Jewitt, S. and S. Kumar (2000), 'A Political Ecology of Forest Management: Gender and Sylvicultural Knowledge in Jharkhand, India', in P. Stott and S. Sullivan (eds), *Political Ecology: Science, Myth and Power*, London. Edward Arnold, 91-113.
- Jodha, N. S. (1985), 'Market Forces and Erosion of Common Property Resource' in Agricultural Market in Semi-Arid Tropics Proceeding for an International Workshop. ICRISAT, Patancheru, India. pp. 263-227.
- Kumar, S. (2002), 'Does Participation Help the Poor? A Social Cost-Benefit Analysis of Joint Forest Management in Jharkhand, India', *World Development*.
- Kumar, S. (2004), 'Forest Dwellers' Knowledgw of Local Ecological Services', in *Jharkhand: Environment, Development, Ethnicity*. Delhi, Oxford University Press.

Kohlberg, L. (1968), 'Moral Development', in *International Encyclopaedia of the Social Sciences*. USA: Macmillan Co. and Free Press, 1968: 483-494.

Lametti, D. (2003), 'The Concept of Property: Relations Through Objects of social Wealth' *The University of Toronto Law Journal*, 53 (4): 325-378.

Locke, C. (1999), 'Constructing a Gender Policy for Joint Forest Management in India', *Development and Change*, 30:265-285

McAdams R. H. (1997), 'The Origin, Development, and Regulation of Norms', *Michigan Law Review*, 96(2): 338-433.

————— (1996), 'Group Norms, Gossip, and Blackmail', *University of Pennsylvania Law Review* 144(5): 2237-2292.

Mandelbaum, D.G. (1970), *Society In India. 2 Volumes*, Berkeley: University of California Press.

McCloskey, D. (1976), 'English Open Fields as Behaviour Towards Risk' *Research in Economic Theory*, Fall 1976 (1): 124-70.

Munzer, S. (1990), '*A Theory of Property*' Cambridge: Cambridge University Press.

Naik, T. B. (1974), 'Foreword', in M. L. Patel, *Changing Land problems of Tribal India*: Bhopal: Progress.

Netting, R. McC. (1992), 'Unequal Commoners and Uncommon Equity: Property and Community Among Smallholder Farmers', Presidential Address IASCP Third Annual Conference, Washington, DC, September. Published in *Ecologist*, 1997, 27(1): 28-33.

Noronha, R. and J. S. Spears, (1988) *Sociological Variables in Forest Project Design. Putting People First* (ed. by M. Cernea), Oxford, Oxford University Press.

Netting, R. (1976), 'What Alpine Peasants Have in Common: Observation of Communal Tenure in a Village', *Human Ecology*. 4(2): 135-46.

Merry, S. E. (1984), '*Rethinking Gossip and Scandal*' in *Towards a General Theory of Social Control*, Donald Black ed.

Mitchell, L. E. (1999), 'Understanding Norms', *The University of Toronto Law Journal*, 49(2):177-248.

North, D. C. (1990), '*Institutions, Institutional Change and Economic Performance*', Cambridge University Press.

North, Anderson and Hill (1983), '*Growth and Welfare in the American Past: A New Economic History*', Prentice Hall.

Nugent and Sanchez (1999), 'The local Variability of Rainfall and Tribal Institutions: the Case of Sudan', *Journal of Economic Behavior & Organization* 39 (1999) 263–291

Olson, M. (1965), ' *The Logic of Collective Action. Public Good and Theory of Groups*', Cambridge, Mass, Harvard University Press.

Omvedt, G. (1982), *We Will Smash the Prison: Indian Women in Struggle*, London. Zed.

Ostrom, E. (2000), 'Private and Common Property Rights' Arthur F. Bentley Professor of Political Science: Co-Director, Workshop in Political Theory and Political Analysis, and Centre for the Study of Institutions, Population, and Environmental Change, Indiana University.

————— (1991), 'Governing the Commons: the Evolution of Institutions for Collective Action' Cambridge University Press.

Ostrom, E. et. al. (1994), 'Rules, Games and Common Pool Resources', *University of Michigan Press*.

Patil, S. (1993), *The Future of Indian Forest Management: into the Twenty First Century*. National Support Group for Joint Forest Management, Society for Promotion of Wastelands Development and Ford Foundation. Joint Forest Management Working Paper 14, New Delhi.

Penner, J. (1997), 'The Idea of Property in Law' Oxford: Oxford University Press.

Posner, E. (1996), 'Law, Economics, and Inefficient Norms', *University of Pennsylvania Law Review*. 144 (5): 1697-1744

Posner, R. A. (1997), 'Social Norms and the Law: An Economic Approach', Papers and Proceedings of the Hundred and Fourth Annual Meeting of the American Economic Association, *The American Economic Review*, 87(2):365-369.

————— (1992), Cross reference, Sunstein, C. R. (1996), 'On the Expressive Function of Law', *University of Pennsylvania Law Review*, 144 (5):2021-2053

Robbins, P. (2000), 'The rotten Institutions: Corruption in Natural Resource Management', *Political Geography*, 19: 423-43.

Roy, S. C. (1984), *The Oraon of chottanagpur: Their History, Economic Life and Social Organisation*, Ranchi: Man in India Office.

Schermerhorn, R. A. (1978), *Ethnic Plurality in India*, Tucson: University of Arizona Press.

Schlager, E., & Ostrom, E. (1992). Property-Rights Regimes and Natural Resources: A Conceptual Analysis, *Land Economics*, 68(3), 249–262

Schmidheiny, S. (1992), 'Changing Course', *A Global Business Perspective on Development and the Environment* 181-330.

Seabright, P. (1993), 'Managing Local Commons: Theoretical Issues in Incentive Design' *The Journal of Economic Perspective*, 7(4): 113-134.

Sengupta, N. (2004), 'Common Mistakes About Common Property' Paper Prepared for the IASCP Tenth Biennial Conference, Oaxaca, Mexico, August 2004.

————— (1995), 'Common Property Institutions and Markets' *Indian Economic Review*, 30 (2): 187-201.

Sharma, B. D. (1978), 'Administration of Tribal Development', *Indian Journal of Public Administration*, 2 (3): 515-39

Shiva, V. (1988), *Staying Alive: Ecology and Survival in India*, New Delh: Kali for Women.

Shiva, V., H. C. Saratchandra, J. Bandyopadhyay (1987) *Social Forestry For Whom? Community Management: Asian Experience and Perspectives* (ed. by D.C. Korton), Connecticut, Kumarian Press. pp 238-246.

Simon, H. A. (1991), *Models of My Life*, Basic Books, New York

Singh, K. S. (1966), *The Duststorm and the Hanging Mist*, Calcutta: Mukhopadhyay.

Strahilevitz, L. J. (2003), 'Social Norms from Close-Knit Groups to Loose-Knit Groups', Centennial Tribute Essays, *The University of Chicago Law Review*, 70 (1): 359-372.

Stigler, G. and G. Becker (1977), 'De Gustibus Non Est Disputandum', *American Economic Review* 67(2):76-90.

Sunstein, C. R. (1996), 'On the Expressive Function of Law', *University of Pennsylvania Law Review*, 144 (5):2021-2053

Tewari, D. N. (1995), *A monograph on Sal (Shorea Robusta)*, Dehra Dun; International Book Distributors.

Welch, W. P. (1983), The Political Feasibility of Full Ownership Property Rights: The Case of Pollution and Fisheries, *Political Science*, 16: 165-80.

Weitzman, M. (1974), 'Prices vs. Quantities', *Review of Economic Studies*, October, 41(4): 447-91.

Ciriacy-Wantrup, S.V. and Bishop R.C. 1975. Common Property - A Concept in Natural Resources Policy, *Natural Resources Journal* 15.

