Birds don't give a Dam: The politics of Hydropower Development and Wildlife Conservation in Arunachal Pradesh

by

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Abstract

Over the last decade, Arunachal Pradesh, or the larger region known as Northeast Himalayas, has not only become a potential energy frontier to meet India's surging energy demands, but an opportunity for those in the state seeking political and financial independence. Dams are celebrated and endorsed as a 'clean" and "renewable" energy sources that ensure sustainable development, and politicians and major corporations are making promises of great economic benefits and job opportunities arising from these projects. However, rapid development, lack of appropriate consultation, and the deficiencies of environmental and social impact assessment have provoked political and social debates in the region. Simultaneously, since the region is known to be biodiversity rich and geographically fragile, the impacts of the developmental activities has raised concerns among wildlife biologists, ecologists and experts regarding the potential negative impacts on ecology, economy, and society. In this discourse of energy development, deteriorating ecosystem integrity, and heightened vulnerability, Arunachal Pradesh is increasingly being represented as a place of economic opportunities for both region and nation, but also of risks and vulnerabilities. In this setting, there is also resistance and negotiation, and interactions between various forces that are shaping a new social-environmental relationship. In this paper, focusing on one community, the Monpas, who are the largest ethnic group in the region, and the case study of Nyamjang Chhu hydropower project, I discuss how different stakeholders such as developers, conservationists, and religious institutions deploy narratives of change, articulate their respective claims over resources, developmental plans and conservation ideas; the power relations within and between these different stakeholders, and explore how the Monpas respond to and negotiate with these dominant perspectives.

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Chapter 1

Introduction

In April 2012, India's Union Ministry of Environment of Government cleared the way for the development of the 750MW hydropower project on the Nyamjang Chhu River in the Zemithang valley of Tawang district in the state of Arunachal Pradesh. Prior to this event, an online newspaper Live Mint published an article, the title of which ran "Can the Crane shift the dam?" (Banerjee, 2012). Though the article did not receive much attention at that time, four years later, in 2016, the National Green Tribunal (NGT) suspended the Union Environment Ministry's clearance for the Rs. 6,400 crore projects; in order to protect the future habitat of an IUCN red listed vulnerable species, the Black Necked Crane (Grus nigricollis) (NGT, 2016, p. 21-26). Ritwick Dutta, a renowned environmental lawyer who was also the lawyer for a social-religious group called Save Mon Region Federation[1] of Arunachal Pradesh, that appealed to the National Green Tribunal of the Indian court against the Environmental Clearance to revoke the Environment Ministry's green signal to proceed with the project said that "this is probably the first time that a threat to wildlife played a key role in the court's decision to suspend environmental clearance" (Koshy, 2016). This was not an exaggerated statement because on the basis of the last five years of assessment of Government of India reports, more than 20,000 to 35,000 environmental clearances are given by MOEF (Ministry of Environment and Forestry) and SEIAA (State Level Environmental Impact Clearance Authority) annually for unprotected areas that are rich in biodiversity. Out of these only a small number of appeals (around fifty) are filed every year against projects through the NGT; these projects are considered to cause significant harm to the surrounding environment and community. In the last five years, only three of these appeals were

[1] Save Mon Region Federation

taken to the higher court of which only two were challenged in the Supreme Court, making the Nyamjang Chhu project the first hydropower project to be halted on the grounds of environmental protection outside a protected area (Riwick Dutta, lecture at Tezpur, May 21st 2016). [2]

Deriving from my ethnographic work in West Kameng and Tawang districts of Arunachal Pradesh between May and July 2016, and my earlier work in Tawang district during 2013 and 2014, this thesis is an anthropological study of the Nyamjang Chhu Hydropower project in the Zemithang Valley. I analyse the historical and contemporary process of hydropower development within the context of wildlife conservation in western Arunachal Pradesh that lead to the socio-economic and environmental marginalization, and increase in public participation among the Monpa community in western Arunachal Pradesh. In this thesis, I also try to highlight how discourses on the power of certain animals that are shielded by the state and international organizations have led to the halting of the construction of the dam. To this end, I explain that the concept of "wilderness", which had developed during the colonial projects to frame and account for human-environment relationships, is constituted and practised in contemporary India through legal frameworks. Finally, in this discourse of development and conservation, I explore how the community has successfully found their ways and means to anchor to this powerful rhetoric of "wilderness", and use notions of being "indigenous" to mobilise themselves to resist the power structure and successfully move towards a more constructive decision-making process.

[2] Ritwick Dutta- Environmental Lawyer and managing trustee for the organization Legal Initiatives for Forest and Environment

1.1 The Anthropological Context

Within the broad arena of the changing environment and large scale resource extraction, in recent years anthropological ethnographic research has contributed extensively to understanding human-environment relations (Nuttall, 2009; 1998;Appadurai, 1996; Karlsson 2011), debates about traditional knowledge vs. scientific knowledge (Hobart, 2002; Agarwal, 1995), scientific wildlife conservation (Bushcher et.al 2007; Rangarajan 1999; 1996), community engagement in democratic decision making (Nadasdy 2003; Klooster, 2000) especially within the context of historical and contemporary environmental, and social and political change in resource rich areas. In this thesis, I cover all the above mentioned topics, but my sole aim is not to highlight the impact of all these issues on the Monpa community. Rather, I am interested in how the community uses each of the discourses and the idea of place to rise against power. My aim is to unfold the politics surrounding the production and use of knowledge among various stakeholders, and its socio-economic impact on marginalised communities in resource rich areas.

Like other anti-dam movements across India bearing historical significance, such as the *Narmada Bachao Andolan* (Dwivedi, 1997), or agitation against the Tehri dam, and the movement against the construction of the Hirakund Dam, which thrived mainly on compromised nationalist rhetoric, scarcity of environmental and social impact assessments, and threats of large-scale displacement, resistance against hydropower projects in the west Arunachal landscape is quite similar (Nayak, 2010, p. 69-73). However, multilevel discourses concerning the state's strategic borderland location, the socio-political history of isolation during the colonial and post-colonial period, the large network of dams proposed for different river basins,

the numerous small yet heterogeneous communities potentially affected by the change (Gogoi, 2011, p.1), and most importantly the popular representation of the region being "pristine", "remote", and "mystical", makes it a unique and interesting case study to explore the contextual geo-politics of energy development and conservation practices that have given rise to a long-running conflict surrounding development activities (Banyan, 2012; Swarupa, 2013).

In recent years, as India continues to be one of the fastest-growing economies in the world, its energy consumption is expected to spike considerably, emphasizing the need to tap into the country's rich hydropower potential. Its total installed power generation capacity of 307,278 MW3, thermal source is the main energy source that dominates 69 percent of the total energy production in the country. With the increasing revenue generation and energy demand, India has recognised it's Northeast as the next "power-house" of the country. India is trying to harness untapped water resources of the riverine system of Northeast India which politicians and industry say happens to be the country's last hope. With the region opening up to large hydropower projects, the area has been mapped with over 160 dams and is emerging as a resource frontier for the overall economic growth of the country (Lenin 2014).

According to Karlsson (2011), a frontier is a place that makes a relationship with dominant, expansionist centre. Northeast India always had a special administrative relationship with the centre (explained later in chapter 3). The East India Company started to reach out from the Bengal plains and during the eighteenth century and Sylhet[4] was then the administrative frontier province of colonial India. With the defeat of the Burmese in 1826, as the Ahom kingdom was brought under the imperial supremacy, Assam became the new Northeast Frontier (Ludden,

[4] Sylhet is a metropolitan city in Northeastern Bangladesh. It is the administrative seat of Sylhet Division. The city is located on the right bank of the Surma River in Northeastern Bengal

2003, p.3; Karlsson, 2011, p. 269). With time the Northeast administrative frontier started to push towards further hill states and their people. However, scholars like B.G. Verghese (1996) and Karlsson (2011), said that the region was always a problem for governance under the colonial administration. Thus, the notion of the Northeast as an administrative frontier is more of a state-centric mode of thinking and not a central perception as frontier is always in regard to centre and state relationship, in contemporary India, Karlsson describes Northeast India as a "resource" frontier. But, one cannot generalise northeast to be a holistic resource frontier space, as each state is a highly differentiated space. The region is built up as several different frontiers with varied experiences of colonial and post colonial resources struggles. Like Meghalaya has its own struggle of Uranium mining. But the region never had a good relationship with the central government (explained later) but the colonial government saw the region to have resource potential that could be harnessed for revenue generation. Thus, during the colonial period, anthropologist Christopher von Furer was appointed in 1944 by the colonial government of India as a special officer with a mission to "establish friendly relations with the un-administered hill-tribes". Eventually silver, rupee coins were offered to the hill community in exchange of resources. After independence, in 1980s and 1990s, Arunachal Pradesh became the scene of extractive timber extraction, something that was made possible by the construction of roads in the state. Anthropologist Alexander Aisher, who carried out fieldwork in neighbouring areas later, said that people began to leave these villages to settle along the main roads. But with strengthening of wildlife protection and banning of timber extraction, logging was no longer a major source of revenue generation. The shift started to take place when centre government started to identify resources like Uranium, natural gas, and most importantly water as primary

resources. Hydropower potential in Arunachal Pradesh was first outlined, and the region became a key to this resource lead development for the entire nation.

However, this process has given rise to two major discourses. First, the historical administrative relationship between the centre and the periphery where the centre tries to dominate the periphery has assumed a new shape. The developmental activities are reflective of this situation. Arunachal Pradesh, largely known as Northeast India, has faced significant challenges in relation to present-day democratic India. Like many other sparsely populated and contested regions around the world, Arunachal Pradesh has faced institutional discrimination, colonial isolation, marginalization, and political domination by central government institutions and policies because of its huge linguistic and religious diversity, "unique" livelihood and other socio-economic and political activities, like transhumant pastoralism[5] and monastic taxation system. Though the relationship between centre and periphery has changed significantly since the eighteenth century or the beginning of the colonial period (Explained in chapter 3 and chapter 4), the continuing realities of institutional discrimination and ongoing struggles over socio-political and environmental integration is a contemporary issue. This issue is exacerbated by the decisions and policies undertaken by the state and private companies that do not involve public participation or are discriminatory and/or assimilationist in nature (this is discussed further in chapter 3). Reports, interviews and scholarship suggest that there is endemic corruption in the nature and process of such development. Thus, along with geographical and socio-political barriers to public participation that has given rise to contestation among local people, each of these hydropower agreements signed since October 2010 between the state and project

[5] Transhumant Pastoralism or Transhumance:
Transfer of livestock from one grazing ground to another, as from lowlands to highlands, with the changing of seasons.

proponents, has been accompanied by huge monetary advances that were taken from project developers during the time of signing the deal. This happened before the preparation of a detailed project report, without any public consultation and before receiving the mandatory project clearance (Vagholikar & Das, 2010, p.3). The rush into monetary advances during the signing of MoUs (Memorandum of Understanding) compromised the process of development. In 2015, the ex-chief minister Namab Tuki said, that several of these MoUs and Memorandum of Associations (MoAs)that were signed between private companies and the state, have already been cancelled because the private players were facing a considerable number of hurdles. Due to the lack of infrastructure, roads and power lines, frequent outbreaks of protests by different social and environmental groups in the region, have led to many projects stagnating at an early stage of development (Rahman, 2016). Thus, some private players such as Jindal Power Limited and Bhilwara Group are now working in association with the National Hydroelectric Power Corporation (NHCP) because the projects are not sufficiently profitable to be carried out single-handedly by these private players (Rahman, 2016). As I will show later in this thesis, people have also started to recognize the barriers to public participation, as the public hearing process has showed significant deficiencies (Chakravartty, 2012). These include knowledge gaps between the community and the developers, and social, economic and infrastructural obstacles, where local people have little or no opportunity to hold authorities accountable or to respond quickly to loopholes in these developmental processes. This has rendered the region susceptible to corruption. According to a local protester, the money allotted to some projects, was used up by political leaders and other developers, even before the start of these projects (Personal interview, 2016).

The second and the most important discourse concerns the region becoming a hydropower state. Many local activists and conservation-based organizations are concerned about the fragility of the ecosystem, along with the community's viability and human health. In Arunachal Pradesh, a region rich in biodiversity with sparse yet diverse societies and cultures, these rapid development activities have raised concerns and uncertainties among certain stakeholders. As a consequence, they have garnered the attention of various international organizations on the Northeastern Himalaya as a critical area that requires biodiversity conservation and sustainable development. With the increasing exposure to and interaction with various international and national organizations and stakeholders in the last decade or so, there has been a significant rise in awareness and agitation among the local people that has led to increase in public participation in processes concerning the construction of hydropower projects. Local communities have successfully mobilised themselves to participate in political action on environmental issues and sustainable development. Thus, the region is not remote, despite popular images that state otherwise.

These popular images of Monpas[6] in larger national and international media have depicted themes being a peaceful community residing in a remote pristine place in the mountains, away from the real world and practising Buddhism. However, the Monpas of Tawang and West Kameng districts are tightly-knit politically, economically and socially to the national mainstream and to the global economy through tourism, jobs, service sectors, business etc. However, strategies to initiate and mobilise indigenous and local political movements or to achieve self-determination and participate in decision-making processes are often fuelled by the construction or assertion of ethnic and cultural identity and the notion of "indigenous-ness". For instance, in his discussion of

[6] The"Monpa"is a community. On the other hand when I refer them as the "Monpas" I am referring to the people of the group/community

Arctic indigenous action and activism, Nuttall (1998) explains how communities use "indigenous-ness" as a tool to fight back against dominant power structures:

> "to claim one is a member of an indigenous, rather than a local or even a minority group, is to play on the rhetorical value of these notions in articulating, displaying and defending one's social identity and to claim that one belongs to a group or place. The use of such rhetoric has become essential for Arctic peoples as they argue that their demands for ownership of or title to lands and resources are based on two undisputable claims: that they have a unique and special relationship to the Arctic environment which is essential for social identity and cultural survival; and that they have never given up their rights over lands and resources in the first place—rather, land has been expropriated and resources exploited without due regard to indigenous peoples. Claims to lands and resources are thus based on cultural and historical rights: The Arctic environment not only sustains indigenous peoples in an economic sense, it nourishes them spiritually and provides a fundamental basis for the distinctive cultures and ways of life they are fighting to protect" (Nuttall, 1998, p.3)

Given the present circumstances of change in Arunachal Pradesh, communities are using "indigenous-ness" as a tool to fight back against power structures. They seek to use "indigenous-ness" to their advantage because this region is portrayed as remote and untouched. Not just that, the people of this region are portrayed as religious, traditional and innocent by larger media and historical writings. Through various interactions with stakeholders, the community is now reformulating the notion and sense of "indigenous-ness" to match the present setting of socio-political change. Paul Nadasdy (2003), who has explored aboriginal and state relationships in the context of co-management of environment and resources in the southwest part of Canada's

Yukon Territory, states that "while to participate in land claims negotiations, they (the local people) had to learn to speak the unfamiliar languages of wildlife management and property law and translate their own understanding of the world into those bureaucratic legal languages".

In case of Zemithang Valley, there is also an adjustment in the way local people view actors like conservation based NGOs and wildlife biologists. Even a couple of years ago, these conservation advocates, who were once unpopular among the local people, have all of a sudden become their allies, supporting them against the construction of large dams and seeking to protect the landscape. They are playing a prominent role in non-governmental advocacy. As Arunachal Pradesh is an Indian state where the community owns most of the forest land, to protect the landscape, it is inevitable for the external conservation agencies to gain the support from the local people to work in these areas. For over a decade, organizations like WWF-India have been working in the West Arunachal region (both Tawang and West Kameng district) to conserve biodiversity. The organization has partnered with local villages, the Indian Army and the Forest Department to maximise the effectiveness of their conservation strategy. By designating some of the locations as Community Conserved Areas, they claim to have integrated western scientific knowledge with local knowledge to manage the resources. Although government and non-governmental organizations make efforts towards cooperative management, also known as co-management of local resources (especially wildlife) by building community conserved areas (CCA), this does not necessarily improve tribal and state relations because most national conservation policies are rooted in a colonial conservation system. However, in this process, local people interact with "experts" such as scientists, lawyers, and wildlife biologists and learn new vocabularies and communication tactics to participate in negotiation processes, which gives them a voice to stand against the dominant power structure. Moreover, despite the

efforts made by the state to recognise traditional knowledge, the main objective of the state/political power is still to push its agenda of building large hydropower projects, which is against the people's will. This leads to corruption and chaos within the socio-political framework, but also produces new knowledge. Quarles van Ufford (1985) argues that in many cases "administrators of a project have to face a dilemma: whether to comply faithfully with the original aims of the project or to reformulate the policy to make it more workable in practice. Efforts to execute policy and to remain faithful to the original plan and goals are bound to fail. Attempts to integrate various social fields in practice lead to (often defensive) reactions. The more faithful is the implementation, the more intense is the counter-reaction" (ibid, p. 155). With the constant intervention of various stakeholders, the reshaping of various knowledge systems, like the introduction of western education during colonial and post colonial period, modern democratic legal system, changing livelihood, and with the conflicts between traditional knowledge and scientific knowledge, the community and other stakeholders are very conscious about their reaction towards different types of information.

The reason why this negotiation between the Monpas and the other stakeholders interests an anthropologist is because, even though many communities in different parts of the world build their own ways of strategizing, perceiving and reacting to different information provided by NGOs, working groups, states and developers to resist the power structure, in most cases those at the margins are often silenced and limited by dominant power structures. But, Hooks's *Choosing the Margin as a Space of Radical Openness* offers a look into the politics of location and an alternative use of the margin (Hook, 1989). Hook states (1989) "as a radical standpoint, perspective, position, the 'politics of location' necessarily calls those of us who would participate in the formation of counter-hegemonic cultural practice to identify the spaces where we begin the

process of re-vision" (Hooks, 1989, p.149). For Hook, the margin is a "space of radical openness…a profound edge" (ibid, p. 149). Thus, this was the first time in democratic India that the margin could develop their leucocratic ways to stand up to their oppressors. James Scott has an explanation for this. His book *The Art of Not Being Governed* opens with a quotation from Pierre Clastres, whose work speaks directly both to the themes of Scott's (2009) excellent study of Zomians and to the road ahead for Zomia studies. He says, "The history of people who have a history is the history of class struggle. It might be said with at least as much truthfulness, that the history of peoples without history is a history of their struggle against the state." (Clastres, 1987) But the concept of Zomia traces way back. Jean Michaud's explanation of the Zomia helps to identify the concept that was coined in 2002 by the Dutch social scientist Willem Van Schendelin an article published in the geography journal *Environment and Planning D: Society and Space* (Michaud, 2010). Van Schendel's presentation of a macroscopic analysis, proposes 'Zomia' as a region in highlands of Asia, from the western Himalayan Range through the Tibetan Plateau and all the way down to the lower end of the peninsular Southeast Asian highlands. Thus, 'Zomia' was represented as a political and historical entity significantly distinct from the usual area divisions of Asia: Central (Inner), South, East, and Southeast. It is an area marked by a sparse population, historical isolation, political domination by powerful surrounding states, marginality of all kinds, and huge linguistic and religious diversity. Jean states that this concept further evolved in 2007, when scholarly discussions on the western Himalayas started to react to his 2002 proposition. Van Schendel opted to extend Zomia further westward and northward, including southern Qinghai and Xinjiang within China, as well as a fair portion of Central Asia, encompassing the highlands of Pakistan, Afghanistan, Tajikistan, and Kyrgyzstan

(ibid, p. 188). This led to the formation of Zomia that stretched across the high-altitude grasslands of Western and Eastern Himalayas.

Many scholars have adopted this concept of Zomia to explain the culture, society and the politics of different regions and their relationship with the central or state by remodelling the geographical location or area. But Scott, who focuses on the eastern part of Schendel's version of Zomia, says that Zomia is a trans-national high altitude region of South-east Asia, where the hill societies share some distinct characteristics of political, social, cultural heritage that benefits them to distance themselves from the lowland states or the central. Scott argues that the hill communities have made certain choices or have built adaptive strategies to create a shield around them, to avoid interference from the state. These state-resistant spaces in the uplands are not just places on a map, Scott argues, but positions vis-à-vis state power. The distinctive features of hill societies – their agriculture, religion, social structure, virtually every aspect of their lives – are mechanisms for 'escaping' lowland state authority (Scott, 2009 p.4). Arunachal Pradesh and its various indigenous communities happen to be part of Scott's Zomia. However, since west Arunachal Pradesh, namely West Kameng and Tawang district happens to be part of the lower Tibetan grassland region, where most of the people are Monpas and practice Tibetan Buddhism, they also have a different traditional way of adapting to the changes compared to the "anarchist"[7] nature of communities in the eastern part of Arunachal Pradesh (communities that neither follow the Tibetan governance system, neither the governing system of the plains)and the rest of Scott's Zomia (this is explained later in my thesis). Jean's model of Zomia, or the South-East Asian massif does not include this region because of its different governing system. According to him,

[7] Colin Mackenzie was a Schottish army officer in the British East India Company, who later became the first Surveyor General of India. He described the hill people as "savage races" or: savage and warlike tribes", by stressing their "primitive" livelihood activities, violent inclination, unique socio-economic and cultural structure.

"…despite its irrefutable minority status within China, Tibet and the Tibetan cultural periphery are historically more appropriately conceived of as a distinct entity (Michaud, 2010 p. 205). The Tibetan world has its own logic: a centralized and religiously harmonized core with a long, distinctive political existence that places it in a 'feudal' and imperial category, which the societies historically associated with the Massif have rarely, if ever, developed into" (ibid, 2010 p. 205-206). However, Dan Smyer Yu (2015), through his ethnographic work, argues that in modern Tibetan studies, an increasing number of scholars look upon non-Tibetans' perceptions of Tibet as what is known as "the imagined Tibet" – a projection of a collective fantasy that is not Tibet itself. Such critique has mostly been centered upon how Tibet is imagined in the West and Smyer Yu highlight the works of Peter Bishop (1993), and Dibyesh Anand (2008). Throughout the book, author has expressed his reluctance by providing examples of motion pictures, literary works, travel writings, and tourist commercials just to prove that even with political, social changes happening over and over again, the medium to poetry the landscape of Shangrila, always materializes through a "mindscape" which is by imagining Tibet as a place *below the snow covered mountains under the sublime blue sky* (Smyer, 2015 p. 214). "Tibet is orientalised and imagination is frequently equated with fantasy; thus what is imagined is associated with the socio-psychological issues of the West rather than with Tibet itself. Tibet then is an object of transference in the psychological sense. Such a critical trend has also been growing in China since the turn of the twentieth century; however, how Tibet is imagined among Tibetans and Chinese in contemporary China is given little attention by most scholars" (ibid. 2015 p. 215-216). However, while critiquing works of filmmakers, artists, and writers, Yu says that this formation of cultivated mindscape cannot be observed in isolation. There is a reason why the landscape allows the west to cultivate the mindscape. "if I were a native county cadre in

Shangrila caught between modernization and cultural preservation; if I were a fundraiser for an NGO specializing in nature conservation; and if I were a fiction filmmaker who has to balance his creative aspiration and perceived consumer demand for specific cinematic contents, I would write about Tibet if my livelihood depended upon creatively representing Tibet's people and land" (ibid. 2015, p. 225). West Arunachal Pradesh, which is located in the lower Tibetan belt, comes under the similar framework or mindscape that was explained by Yu. This imagination further gets validated due to the rich biodiversity and the religious attachment that the people have with the monastery. Due to its religious attachment to the monastery, the community has developed a governing and social system which was quite unique from the remaining parts of Northeast India. However, with the increased involvement of the state, formation of modern states where the Monpas interact with east Arunachal Pradesh and the central government, it forms its own unique resistance strategy. This is a combination of Tibetan centralised religiously harmony, with anarchic tribal influence and central democratic governance. Through my research, I seek to understand how the political, social and cultural history of the region helps people successfully formulate a mindscape that benefits them to distance themselves from the lowland states or the central. Scott argues that the hill communities have made certain choices or have built adaptive strategies to create a shield around them, to avoid interference from the state. In the process this region has been reconfigured nationally and internationally as a global site for development, conservation and protection, in turn making the region important globally. Thus, my research in Arunachal Pradesh becomes a case study that not only situates itself within current anthropological debates concerning resource management, co-management, human-animal relations, resource frontiers, identity and resistance, as well as the policy aspects of development and resource management, but also people's relationships to a place and how

people are entangled within the complexity of different approaches to the region, as well as their dealings with companies and conservationists.

1.2 Background

Although on a small scale, agitation and resistance against the development of large hydropower projects have been around in Arunachal Pradesh, and also in the larger region of Northeast India, since the time the central government mapped and started implementing its plans of building infrastructure to produce over 40,000 MW of hydro-power energy (Vagholiker & Das 2010 p. 3). Starting from the early 2000s until 2010, the state of Arunachal Pradesh had already signed 132 Memoranda of Understanding with both private and public sector companies to install a total capacity of 40,140 MW, with 120 of these projects involving private players. Though the Nyamjang Chhu project was halted on scientific and legal grounds, starting from early 2000s, and even after the decision was made to halt the project, the state has witnessed numerous socio-political and environmental changes, which showcased the struggle and contestation between the state and the local people. The development of the dams did act as a form of marginalization of certain stakeholders or individuals and also formed an opportunity for the community in Arunachal Pradesh to resist. As the community found their ways to counter the hegemonic practices by seeking awareness and developing communication skills, it also enhanced the contestation in the region as it had been impacting the hopes of the state government and the local elites. This is because, while the Government of India has been aiming to build Arunachal Pradesh as a potential energy production house for the entire nation's economic growth, it has simultaneously captured the attention of local elites, as an opportunity to have greater economic autonomy in decision-making and a release from the stronghold of

historical colonial and post-colonial policies (explained in detail in chapters 3 and 4) over planning and development activities that are in line with national rather than regional interests.

In the last decade, a sequence of events has brought the region to a stage of political disorder. After the sudden death of then-Chief Minister (CM) of Arunachal Pradesh Kalikow Pul[8], his successor Pema Khandu of the Congress stated in July 2016 "All projects undertaken by the previous regimes in the last four years will be fast tracked and thrust will be given on tourism, hydropower, agriculture and horticulture, health education and communication" (PTI, 2016)

During his swearing-in ceremony, Khandu, the youngest CM of the country, stressed the urgent concern of constant emigration of people from border areas in search of jobs. He stated emphatically, "something needs to be done seriously so that people stop migrating from border areas. He added that the government would find ways to tap the petroleum resources and harness the hydro-power potential which could be a money spinner for the state" (Neelakantani, 2016). While "Team Arunachal", a name suggested by Khandu for the group of unified elected leaders of the state, irrespective of party affiliation, hopes to expedite all developmental activity, in recent years the national and state governments have also been aiming to implement policies to create new opportunities for long-term economic and social development that will evolve from the planned development.

[8] Late KaliKow Pul committed suicide in the year 2016. He committed suicide. One of the speculation being that he was way too much entangled in the state corruption and the pressure from the central government pushed him to tak this action. However, there is no concrete evidence for this death.

1.3 Research Approach

In this thesis, as mentioned above, I explore the importance of colonial and post-colonial practices of external actors, especially international NGOs and wildlife-based conservation organizations, working groups and their roles in advocacy and in mobilising the community. To this end, deriving from James Scott's concept of "Zomia" where the periphery strategizes ways and means to resist the centre, I try to highlight how the conservation of wildlife and the environment has developed as a co-management activity in this region. With the aim of achieving sustainable development, this co-management practice is known as a form of collaboration between forms of traditional/ indigenous knowledge and scientific knowledge and a range of local practitioners and regional/state authorities and institutions. However, throughout my thesis I show how this is not necessarily a purely scientific process of co-management to attain a sustainable solution, but a completely political process, an argument developed in anthropological works on co-management such as that of Paul Nadasdy (Nadasdy, 2003), who states that culture and traditional knowledge are reconstructed and bureaucratised to match such settings, making it no more traditional. Marshal Sahlins (1993) calls this a process of inventing "traditional knowledge", since all traditions are invented in the purpose of the present, "…what distinguishes the current "culturalism" (as it might be called) is the claim to own mode of existence as a superior value and a political right, in opposition to a foreign imperial presence or in this case the power structure. Religion and working groups are thus playing a crucial role in politically advocating the cultural significance, which is more than a "preservation of ethnic identity". This reconstruction of culture is a form of re-packaging of traditional knowledge and is called invention of Tradition" (Sahlins, 1993 p. 11). Throughout the thesis, I have tried to explain this concept. By latching on to the imagination of the Tibetan landscape, and following

Yu's analysis of how Tibet is thoughts about and represented, I argue that stakeholders are trying to build this mindscape of the region that has successfully helped them to halt the building of the dam.

1.4 Thesis Structure and Outline

This thesis is divided into six chapters including this first chapter as introduction. All chapters are connected parts and inform one another. In my introductory chapter, I first set out my areas of investigations. Since not all the readers are familiar with the region and its people, in **Chapter 2**I begin by giving a brief history of the landscape, the idea of the place, formation of the state and how the socio-environmental and political scenario was prior to 2001, when the dams were being planned to be built. After that I discuss my introduction as a researcher to Arunachal Pradesh and what inspired me to return to the region first as a tourist, then as a conservationist and lastly as an ethnographer.

In Chapter 3, I consider historical and contemporary development activities in India and Arunachal Pradesh, and how marginalization happened in the regionleading to democratization and later a resistance movement surrounding the construction of dams. Since the dam was halted on the grounds of poor environmental impact assessment and threat to the habitat of the IUCN listed Black Necked Crane, at this point I discuss the strength of conservation in India.

In **Chapter 4**, I provide a history of conservation activities focused on India's wildlife and how the present practice of conservation is conducted as a form of co-management. Though the main national and international concern is to protect the wildlife, where certain animals have

more power and voice than people, during my fieldwork in the summer of 2016, I observed how the community is using this to their advantage. I show how the community is integrating the conservation based resource management along with their indignity as a weapon to counter the hegemony.

In **Chapter 5**, I draw in ethnographic work to show how co-management is implemented and is taking place, how the integration of knowledge is a form of political process that is fuelling the local people to think about the changes and how they situate themselves to be part of the larger idea of space.

Lastly, in **Chapter 6** I provide the discussion and conclusion. Drawing and reflecting upon James Scott's concept of "Zomia", I argue that conservation of wildlife is not a pure scientific and legal practice but is completely political and helps to fuel the resistance movement. The new forms of social, political governance and the reproduction of "tradition" are not just merely forms of resistance against development activities such as dams or a process of resistance against marginalization, but are acts of being part of the larger "Zomia". The reason why there still remains conflict in the region is because the conflation of various knowledge systems is forceful and is a capitalist process. The neoliberal win-win models of biodiversity conservation bring contradiction, appropriation that in return has a negative impact on the environment and the community. Through this research, I also explore my role as an anthropologist in advocating for better public participation and negotiation among various stakeholders not only in the Himalayas, but also in other landscapes undergoing similar change. In end my thesis by providing a discussion of the potential contribution of my work to the social sciences and anthropology, as well as a way forward to future research.

Chapter Two

The Land of the Rising Sun

One cannot explain the ethnic, political and cultural backgrounds of Northeast Indian states like Nagaland, Manipur, and Arunachal Pradesh by simply tracing contemporary processes back to state formation, or being solely represented by state practices or 'governmentality', or as a newly commoditized form of belonging produced through neoliberal reforms. According to Shneiderman & Tillin (2014), ethnicity or the socio-political background of a region, especially the Northeastern Himalayas, must be understood as a multivalent concept that is at once embedded in specific histories of state and sub-state formation, and are rather generative of them. This is because, the populations of these high-altitude regions shares a heritage that cannot be explained with reference to one particular historical influence of a region or its neighbouring state, as the ethnic, national, and religious aspects of highland communities, and their intentionality and agency vis-a`-vis the states with which they engage, is fluid. There is a transitional nature to these peripheral or border societies which lies outside the national settings and makes every region within the states exclusive in nature. Similarly, in the case of Arunachal Pradesh, with the influence of Tibetan political, religious and governance structures, along with the constant interaction with the tribal communities of eastern Arunachal Pradesh and Assam in the south, Tawang and the West Kameng districts have developed unique socio-political and cultural boundaries. There is a need to describe the demographic and geographic background of the region to discuss the present state formation of Arunachal Pradesh, how it is being reconfigured nationally and internationally as a global site for hydropower- development, conservation, protection and the socio-political transformation of the Community in this present discourse of change. Moreover, it is important to mention here that the demographic,

geographical and climatic description that I have provided of the region is established based on the present state boundaries of the country, that have prevailed from the time of conquest and colonization. Regardless of their legal status, the Monpas retain some or all of their own social, economic, cultural and political institutions, which have also been discussed.

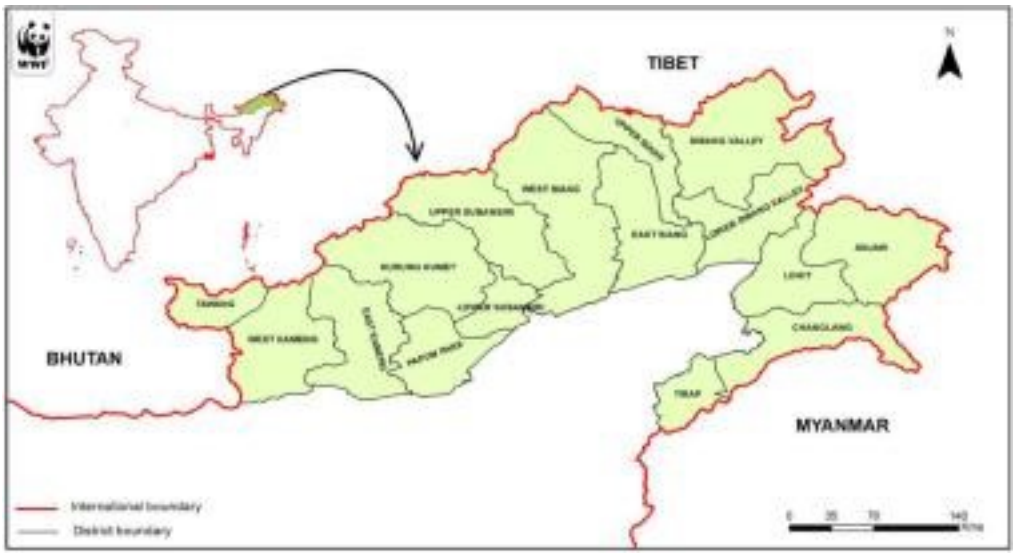

Fig 1: Map of West Arunachal Pradesh (Source- WWF-India, West Arunachal Pradesh)

Fig 2: Map of Zemithang Valley (Source- WWF-India West Arunachal Pradesh)

2.1 A Demographic Description of the Landscape

The Eastern Himalaya is identified as a globally important region for its natural resources and is the habitat of alpine floras with a high level of endemism (ICIMOD, 2001). Arunachal Pradesh lying between 26° 28' to 29° 31' North latitude and 91°30' to 97°30' East longitude with a total geographical area of 83,743sq.km is one of the most biodiversity-rich states of the Northeast part of India. The state shares 2.5% of the total geographical area of the country, 15.76% of the Indian Himalayan region and 43.62% of the Eastern Himalaya (Dollo, Samal, Sundriyal & Kumar, 2009). It is a part of the Himalayan mountain range, which has been identified as a globally-important region for biodiversity (Olson & Dinerstein,1998; Stattersfield, Crosby, Long & Wegge, 1998) and supports high level of endemism in the Temperate Broad Leafed forest areas (WWF & ICIMOD, 2001). It is bounded by Bhutan in the west, China in the Northeast, Myanmar (Burma) in the east and the plains of Assam in the south. The total forest and tree coverage of the state has been estimated to be 6.79 Mha, which is 81.16% of the total geographical area (FSI, 2011). The Protected Areas (PA) constitutes 11.68% of the geographical area of the state. Moderate dense forests[9] account for about 37.64% of the forest area followed by very dense forests accounting for about 24.92%. Forests are classified as Reserved Forests (20.46%), Protected Forests (18.49%) and unclassed Forests (61.05%) (FSI, 2011). At present the state is safeguarded under article 371 H[10]. 82% of the state is under forest cover out of which

[9] The stratification type of forest covers in India was started during the colonial period, explained in chapter 4 on how forest policies were introduced in India during the colonial period

[10] 371H. Special provision with respect to the State of Arunachal Pradesh Notwithstanding anything in this Constitution, (a) the Governor of Arunachal Pradesh shall have special responsibility with respect to law and order in the State of Arunachal Pradesh and in the discharge of his functions in relation thereto, the Governor shall, after consulting the Council of Ministers, exercise his individual judgment as to the action to be taken: Provided that if any question arises whether any matter is or is not a matter as respects which the Governor is under this clause required to act in the exercise of his individual judgment, the decision of the Governor in his discretion shall be

62% of is under community control (Barik, et al., 2007). Arunachal Pradesh (AP) is a Northeastern Himalayan state of India with a population comprised mainly of indigenous people, largely known as the "hill tribes", who practice high altitude pastoralism and are recognised by their traditional way of living and managing their surrounding biodiversity and resources. According to the Indian census report there are 25 major schedule tribes (SC) residing in Arunachal Pradesh at present, which are further divided into sub tribes (Bareh, 2001 p. 122). Among the seven sister states of Northeast India, AP has the lowest population density i.e. 17 persons per square kilometre in 2011 (Census of India, 2011).

2.2 What is "Tribe"?

Defining the term "tribe" has conceptual and empirical problems in academia. But this term which was once used for administrative convenience has now been adopted by the tribes themselves to address people of a region. Though, there is no claim to being the original inhabitants, the tribal identity now gives the marginalised people self-esteem and pride. Xaxa (1999) says, the idea of "indigenous people" is an issue of considerable contention in India today. Even after a few years ago, social workers, administrators, politicians and scholars widely used the term to refer to a certain category of people or used the native equivalent of this term, viz, 'adivas'. However, when the Anthropological Survey of India, under the "People of India Project" identified 461 tribal communities closely linked to administrative and political

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final, and the validity of anything done by the Governor shall not be called in question on the ground that he ought or ought not to have acted in the exercise of his individual judgment: Provided further that if the President on receipt of a report from the Governor or otherwise is satisfied that it is no longer necessary for the Governor to have special responsibility with respect to law and order in the State of Arunachal Pradesh, he may by order direct that the Governor shall cease to have such responsibility with effect from such date as may be specified in the order;
(b) the Legislative Assembly of the State of Arunachal Pradesh shall consist of not less than thirty members

consideration, many communities demanded affiliation to the category of Scheduled Tribe. Since the early ethnographers during the 18th century did not have a clear distinction between caste and tribe, a lot of times these terms were used synonymously. Though inadequate, it was in 1901, when tribe was first defined as the group of people who practiced animism (ibid, 1999 p.3586). Post-independence, a more systematic definition of "tribe" was formulated. However, tribes were still primarily being studied in relation to features and characteristics of the larger society, caste, peasants, class, and religion. Xaxa, says that even though anthropologists have used the word "indigenous" for quite some time, it gained wide currency among international organizations after 1993 with the declaration of that year as the international year for indigenous people. On the other hand, due to the recent history of conquest, immigration, settled and movement in populations, unlike America, New Zealand or Canada, the status of indigenous people in India is quite complex. Ray (1973:124-25) writes, "The communities of people of today whom the anthropologists call tribal, happen to be the indigenous, autochthonous (adivasis, adimjati) people of the land, in the sense that they had long been settled in different parts of the country before the Aryan-speaking people penetrated India to settle down first in Kabul and Indus valley. Within a millennium and half, they gradually spread over large areas of the country and pushed their way of life and civilization over the entire country along the plains and the river valleys".

However, whether groups like the Monpa designated as tribes have been natives of India or non-tribes who were immigrants is unknown; or even if they have not been natives whether their settlement is prior to the arrival of the major social group, the Aryans. Most scholars are of the view that tribes could hardly make any legitimate claim that they are the only natives of India. It is said that there are tribes in India especially in the Northeast whose settlement in the

territories they inhabit today is an even later phenomenon than the settlement of many non-tribes in other parts of India. The Nagas, for example, are known to have come to India around the middle of the first millennium BC, first to Tibet and later to the territory they currently inhabit. This was a period later than the coming of the Aryans. The Mizos are said to have settled in the territory where they live only in the 16th century. In fact, the tribal groups in India are not solely comprised of the Dravidian and Austro- Asiatic speaking groups. A very large number of these tribal groups belong to the Tibeto-Burman speaking groups, many of whom can hardly be considered indigenous if the arrival of the Aryans is taken as the reference to determine who is indigenous and who is not (Xaxa, 1999). Monpas happen to be one of the Tibeto-Burman groups. To restrict the terms "indigenous" to refer to only those groups of people who had entry prior to that of the Indo-Aryans would be to exclude groups like the Monpas from the status of indigenous people. However, a confusion still exists in distinguishing tribals from non-tribals and indigenous from non-indigenous. Thus, a majority of 'tribal' population, recognised by the government over the years are those who are located in rural areas, in forests, hills or mountains including communities that do not practice mainstream religion, or have a unique set of beliefs and livelihood practices.

The Monpa community occupies 5% of the total population of Arunachal Pradesh. Inhabiting the high-altitude region, varying from 10,000 to 15,000 ft., the highest population of Monpas is in the West Kameng and the Tawang district (Nyman, 1976). The West Kameng district of Arunachal Pradesh accounts for 8.86% of the total area of the state. The name of the district is derived from the Kameng river which is a major tributary of the Brahmaputra, that flows through this district. It occupies 7,442 square kilometres (2,873 sq.mi). The district shares international borders with Tibet in the North, Bhutan in the west, Tawang district in the

Northwest, and East-Kameng district in the east. The district is mainly divided into three subdivisions, Thrizino, Rupa and Bomdilla, which are further divided into twelve administrative circles namely Dirang, Bomdilla, Kalaktang, Balemu, Bhalukpong, Jameri, Sinchung, Nafra, Thrizino, Thembang and Shergaon (Bhanja, 2017). The Eaglenest wildlife sanctuary (ES) is one of the most recognised and visited protected areas in this region and it spreads over 218 km2 in the Aka Hills of West Kameng. The district has been a hotspot for a lot of scientific wildlife research since the early 90s (Athreya, 2006; Boyle & Bishop 1987; Choudhury, 2003). However, the West Kameng district started to attract tourists, wildlife enthusiasts, birders since 2006, after Ramana Athreya, a renowned wildlife biologist discovered a species of passerine birds from the Leithrichidae family and named it after the Bugun Tribe[11], Bugun Liocichla *(Liocichla bugunorum)*, in whose communal forests the species was discovered (Athreya, 2006). Since most of the forest covers are under the community regulation, ever since this discovery, conservationists and wildlife biologists have showed urgency to initiate community based conservation initiatives in the region. The vegetation in this district also supports other rich variety of wildlife: Leopards, Red Panda, Takin, Serow, Assamese Macaque, wild dog, clouded leopard, Rufous necked hornbill, white bellied heron etc. and a range of flora diversity like variety of Rhododendrons and orchids (Mishra et.all, 2006; Roy et.al, 2005). The climate of West Kameng is very erratic due to its variation in altitude (213 m MSL at Bhalukpong to 7090 m MSL at Kangte) . It ranges from arid alpine or a cool temperate climate in the north, to mild tropical climate towards the south. Some villages located above 5690 feet above sea level like Khupi, Bomdilla, Nechiphu, Thembang even experience snow during the winter.

[11]The **Buguns** or **Khowa**, are one of the earliest recognized schedule tribe (Earlier known as Khowa) of India, inhabiting Singchung Sub-Division of West Kameng District of Arunachal Pradesh

As mentioned above, the Kameng River is the main river of the district and its drainage basin is 11,843 square kilometres large. It originates in the Tawang district from the Glacial Lake below Gori Chen Mountains, which is the main river that flows through this district. It flows through West Kameng through Bhalukpong circle in West Kameng and joins the Brahmaptra River as a major tributary in Tezpur, Assam. A multitude of lakes, tributaries, springs, drain into the Kameng River. Since the region receives a lot of rainfall, most of them are perennial, but during the summer months some of them dry up making it seasonal. Some of the main tributaries of the Kameng river are Tippi Naala (Tippi River), Tenga Bichom and Dirang Chhu (Rao, 1979). These rivers sustain various livelihood activities like fishing, small scale agriculture, and illegal collection of boulders and stones from the river beds. These boulders and stones are used for various construction purposes like buildings, roads and houses. But recently, the locals have started to raise many questions on the sincerity of the Forest and Mining Department, Police and Local Administration to check the illegal boulder/rock collection and digging the river beds because it causes erosion and disruption of river habitat. However, these activities are labour intensive and create informal jobs for many local people. Several dams have also been constructed on the Kameng River of the West Kameng district to generate electricity; more are at the planning stage. Kameng hydropower project is a 600 MW dam is being built on the Bichorn River (a tributary of Kameng River). Other dams such as the Bichom Dam, is a 24.5-metre-tall dam being constructed on the Tenga River.

The Tawang district encompasses 2085 sq.km bordering with the Bhutanese Mountains in the west, Tibet in the North and the West Kameng district of state in the South (Bora et al. 2006). The district is known for a small trading town called Tawang and popular tourists. Tawang District can be subdivided into three zones based on its geographical locations. In the

North of the district is located the Tawang township, where the world's second largest Tibetan Buddhist monastery is situated. Followed by that is Lumla, the largest administrative block and in the south east of Sela pass is the Jang Zone. As per the 2011 census, the total population of Tawang is 49,950 people and the dominant ethnic group is the Monpa. Tawang has an elevation that ranges from 3500 ft. to 22,500 ft. above sea level. It is located roughly between 91°35' and 92°20' east to 27° 25' and 27° 55 north. The temperature never rises above 20°C and sometimes drops below freezing point during the winters. Rainfall is heavy during June, July and August and average rainfall in the Tawang district is 1800mm. The main forest type in this region is Temperate Broad Leaf forest and Temperate Coniferous forest as well. Some areas are also rich in Alpine forest type of vegetation (Bhattacharyya & Sanjappa 2008). Like the West Kameng district, it supports a range of flora and fauna, like multiple species of rhododendrons, gymnosperms, orchids and medicinal plants. It also happens to be the migration habitat for many threatened endangered species like the Black necked crane, red panda, snow leopard, Arunachal Macaque, Caped Langur, Barking Deer, Takin, Wild Dogs etc. Tawang has been a very significant trade route between Tibet and India, which was also used by Dalai Lama in 1959 to enter India from Tibet. (Nyman,1976). One of the main rivers in this district is the Tawang Chhu (160 km). Tributaries such as Nyamjang Chhu River, Tsu Chhu, Thingbu Chhu, Nykcharong Chhu, etc. all contribute to the Tawang Chu forming one of the largest river basins in Arunachal Pradesh. These rivers support various forms of livelihood and many of them emerge from high altitude lakes or networks of lakes that are considered sacred by the Monpa Buddhist communities. In this tiny district of barely 2000 square kilometres, 13 hydropower projects have been mapped by private and public proponents that are leading to damming and tunnelling these rivers and tributaries mentioned above.

2.3 Villages and their People

Although I spent some time (more than three weeks) in the village of Thembang and Dirang during my field work in 2013, and about a month travelling in various villages like Shergaon, Dumkho and Murshing of the West Kameng district in 2016, those were not my primary focus for this research. My primary study area has always been the Zemithang valley of Tawang district where the Nyamjang Chhu dam is being built. However, the reason I wanted to explore these villages of West Kameng district is because there are many community-based conservation and eco-tourism activities there involving interaction with various external actors. I wanted to understand how these initiatives taken by various local and nations organizations are being implemented. Also, I wanted to gain an overview regarding how differently local people perceive these new initiatives and how they consider themselves to be part of this larger idea of space. Although the largest ethnic group in the region are the Monpas, I also learned (which I explain in Chapter 5 and Chapter 6) that each village has a different history and socio economic structure, which governs their reactions to these changes. The information I have gathered from the villages of West Kameng district has supported my research and feeds into my concluding discussion.

2.4 The Monpas

As mentioned above, the major tribal community is the Monpas. They are predominantly Buddhist, inhabiting the high altitude Himalayan grasslands varying from 10,000 to 15,000 ft. in Tawang and parts of the West Kameng district of Arunachal Pradesh. Subsistence forms of agricultural and high altitude pastoralism were two of the most widespread forms of economic

activities traditionally practiced among the Monpas. However, since the mountain environment and the climate of the region make agriculture difficult, Monpas primarily would follow a customary system of transhumance by moving their livestock between the lower elevation grazing bamboo forest areas in winter and the high altitude grazing in lush green meadows in summer (Norbu 2008). Most people do not practice these traditional livelihood activities, yet transhumant pastoralism is still practiced in many villages.

The Monpas of Tawang district are culturally, socially and politically quite different from that of the Kameng, Monpas. The Monpas differ significantly from one village to another. One of the ways that can be explained is through the language. Roger Blench (2014), states that one of the most characteristic ethnonyms used in Arunachal Pradesh in Northeast India is 'Monpa'. It is used to describe more than one specific indigenous community. Anthropological and linguistic data suggest that "Monpa" is a generic term for non-Tibetan-speaking people in the south of Tibet, and applies to several highly diverse people. It has been used to cover a wide range of languages, which have nothing much in common except a putative Sino-Tibetan affiliation, and so should not be used for classification purposes (Van Driem 2001 p. 472). All the Monpa languages are gathered under the general term 'Bodish', which includes Tibetan and allied languages (Shafer, 1967). Thus, one variety of Monpa which is spoken in Tawang Township, is not only different from the Monpa spoken in Kameng district, but different from villages within Tawang District itself (Norbu 2008). Thus the situation is different for Zemithang as well; all Tawang speakers are not able to understand Monpa languages from other circles or districts at all. Although there are variations in dialect and languages, because of the prestigious Tawang monastery, the exonym 'Monpa' is a mark of high-status, hence many groups use the term for themselves, despite speaking quite distinct languages. Interestingly, in West Kameng and

Tawang itself, Monpa languages and their dialects are severely threatened by the spread of Hindi as a daily language of intercommunication. Speakers in nearby villages such as Lhou are more likely to be able to produce an unadulterated version of the language. On the other hand, Tibetan is the primary language for Tawang speakers and public notices in Tawang are written in Tibetan (Blench, 2014 p. 2). Tawang Monpa is also clearly subject to considerable dialect variation, with Lumla and Jang specifically mentioned. Many words have doublets, i.e. two forms with the same meaning, which may be due to interference from Tibetan or from other dialects. In case of West Kameng, Bugun and Mey cluster (Sherdukpen) are the two popular languages, which have influenced the Monpa language as well. Thus, Blench & Post (2013) suggests that they should be classified together and form a small independent phylum provisionally christened 'Kamengic'.

2.5 The Monpas of the Zemithang Valley

One of the larger pastures of the Tawang district, the Zemithang Valley is mainly home to the Monpa. Pastoralism is what had traditionally underpinned their economy and culture. The Monpas arrived between 500 BC and 600 AD during the reign of the Monyul kings and since then they have been permanent inhabitants of this region. Grazing is still an important socio-economic activity among the Monpas. Milk products from livestock are not only important commodities for consumption and sale in local markets; they were and still are important for trade and transaction between Monpas and other ethnic groups. Thus, barter and trade in the region plays an important role in developing forms of social organization and local institutions as well as in developing significant trans-Himalayan and cross-border trade routes, which later gained importance for the movement of people, animals, and goods between India and Tibet (Humphrey & Hugh Jones 1992, Bora et al. 2014). However, with increasing globalization,

accessibility of other goods, and the availability of imported commodities in local markets, even if there was a shift in traditional economies and a decline in trade and barter, grazing remains significant among the Monpas. Pastoralism not only has an economic importance since milk products retain a high demand in local markets with no alternatives available but the social, cultural and ritual significance of pastoralism also remains significant (Nyman, 1976).

Fig 3: Monpas in their traditional attire in Lumpo Village

Although most of the other Monpas in different parts of Tawang and West Kameng have discontinued traditional livestock rearing and grazing activities, the people in the Zemithang valley still practice these activities because they have strong religious connections with the Monastery, which has played an institutional role for the community. There is a unique faith and cultural involvement of the community with the monastery that has led to the strong attachment with their livelihood activities. The discussion of the community and monastery's relation is important for me to discuss in this chapter, because later in the thesis I explain its significance. According to historical narratives and literature, the Monastery played an important role in

livelihood practices before the modern governing system was established. This prevails even today. Based on the traditional tax collecting system of the monastery, the Tawang district was divided into six zones. *Dhagpa Tso-gyeth, Shar NyimaTsosum, PangchenDingduk, Mag Thing Lugsum, RheblaGangsum, Rho Jagda, Lebo Tso Zye*(under China)and *Shau part of Shau- Rho jagda (under China)* (Norbu, 2008). Some parts of West Kameng were also part of this traditional division system. But later, after independence and during the post Indo-China war period(1962)[12] the region went through a nationalistic reorientation (discussed in chapter 3). Thus, from 1951 to 1999 new district divisions of Tawang subdivision, Jang subdivision and Lumla subdivision were formed. In 1969, the Zemithang circle was recognized under the Lumla subdivision, which was traditionally known as *PangchenDingduk* (Norbu, 2008).

Pangchen Dingduk consists of five villages. Lumpo, Kharmen, Khelengteng, upper and lower Socktsen and Muchut. The total population of Zemithang circle from the 2001 census report is 2805 since it consists of 12 villages including Sirdhi, Khobleteng, Shakti, Thiksi etc. and each village has a population ranging from 200 to 900. With 50 to over 100 houses per village the Zemithang valley is roughly located between 27°42'31.50' north and 91° 43' 47.09' east. The altitude ranges from 1800m to above 5000m and the forest areas are *de facto* under the traditional control of the local villagers. The rules and regulations of their governance system were initially set by the Tawang monastery and there was strict observation by the monastery on all kinds of activities taking place in the Monpa community. According to the Lopen lama, Nanamg Norbo of the Monastery,

[12] Indo-Sino War was a war between China and India that occurred in 1962. A disputed Himalayan border was the main pretext for war, but other issues played a role. There had been a series of violent border incidents after the 1959 Tibetan uprising, when India had granted asylum to the Dalai Lama. India initiated a Forward Policy in which it placed outposts along the border, including several north of the McMahon Line, the eastern portion of a Line of Actual Control proclaimed by Chinese Premier Zhou Enlai in 1959

"the monastery was founded by Merek Lama Lodre Gytso student of the 5th Dalai Lama in 1680; with his wish the Monastery was built and it belonged to the Geluk School of Buddhism and was initially under the Drepung Monastery in Lhasa (Tibet). From the villages under their jurisdiction tax was collected in the forms of *ghee* (clarified butter), *churpi* (milk candy), millet and other agricultural products from different parts of the region. Since Tawang monastery was under the jurisdiction of Drepung monastery a representative, *Yarsang* from the Lhasa monastery used to come on the fifth month of the local Monpa calendar to collect fifteen kilograms of salt, millets, wheat, and milk products, firewood as tax from Tawang monastery. Prior to this the representative from Tawang Monastery used to visit the villages and collect tax from the village head commonly known as Gaon Burah (GB) or *Tsorgen*. Under his position, there is a chieftain, *Gyanchen* whose responsibility was to look after village issue. *Droben* was responsible for collecting the taxes from the villagers, farmers, and livestock owners. This religious administrative system was being followed in the region till the time Tibet went under the jurisdiction of China." (Personal interview 2013).

Until 1962, tax was collected from Tawang district and West Kameng district, as well as some parts of Udalguri in Assam, by the Tawang Monastery i.e. indirectly by the Drepung Monastery.[13] The Gelug, or also known as the Yellow Hat sect, is the latest of the schools of Tibetan Buddhism. It was founded by Je Tsongkhapa (1357–1419), a philosopher and Tibetan religious leader. The first monastery he established was at Ganden, and to this day the

[13] Drepung Monastery: **Drepung Monastery** located at the foot of Mount Gephel, is one of the "great three" Gelug school of monasteries of Tibet. The other two are Ganden Monastery and Sera Monastery.
Drepung is the largest of all Tibetan monasteries and is located on the Gambo Utse mountain, five kilometers from the western suburb of Lhasa.
Goldstein, M. C. (1998). The Revival Of Monastic Life In Deprung Monastery. *Buddhism in contemporary Tibet: Religious revival and cultural identity*, 15-52.

GandenTripa is the nominal head of the school. After India's independence and the Indo-China war, the tax collection by Tawang Monastery was restricted to only the Tawang district. Taxes were collected in the form of agricultural products and milk products depending on the region and what they were good at producing. *Pangchen Dingduk* happened to be the only valley that gave milk products as tax from Tawang. Even in the present time, the reason why grazing has always been an important economic activity in the village is because milk product like *churpi* , *ghee* have been in high demand in the local market and there is no alternative replacement in the market.

2.6 The Household System

According to the Gaon Bhura (GB) of the Lumpo village, the traditional grazing systems of the five villages of Zemithang are unique and very like each other. Depending on the time when the houses were built, this decides the status of that owner and their responsibility for the village and their community. The initial households or settlements which are very old are known as *Khre* or *Khrechen*. Each village has about 30 to 60 old houses, depending on the size of the village. Most of the cattle owners, otherwise known as *Brokhpa* belong to these *Khres* and are known as the special group among the Monpa community who specializes in grazing. This practice has evolved over the years, and it is similar to that of the Monpa pastoralists at Thembang Village, West Kameng District (Dutta, 2011)

2.7 The Grazing Practices

Fig 4: Yaks near the high altitude grazing grounds

The transhumant pastoralism practice has two cycles – a summer cycle and a winter cycle. The summer grazing period is generally from the month of May to October and the area where people take their cattle for grazing is known as ***Jarbrok*** in Monpa. These summer grazing sites are in higher altitude area (4000m to 4500m). The cattle start returning from summer grazing sites by the end of September and by November cattle come down to the lower grazing grounds. Among different livestock, yak stays for a longer period and usually come down by the end of November. This is because yaks are intolerant to high temperature; they can only survive in high altitudes. The winter grazing period mainly starts from November and continues till April. During this period, the nearby village areas are the preferred grazing sites.

The winter grazing is known as *Gunbrok* in local language and are located at lower elevation (2300-2600m altitude).

The livestock that are moved from the winter grazing sites to the summer grazing sites and again back depending on the melting of the snow and start of snowfall are – Yak (pure male), Bree (pure female), Dzo (male cross breed), Dzomo (female cross breed). Traditionally herders had dogs that were trained to travel with the herders to protect the livestock during grazing, but nowadays the number of dogs has also declined. Women also play an important role in grazing among the community. Many of the Brokhpas are women. Women also took care of the health of the cattle, and diseases were mostly cured by traditional medicines but certain diseases which are not diagnosed lead to the death of cattle.

The cycle of this activity not only revolves around the seasons, but, religious activities and festivals are intertwined with these grazing activities, which in return strengthen the relationship of the Monastery with the community. A religious activity surrounding the economic activities strengthens the activity and helps it to continue for generation after generation. Thus, to date, each village from the valley has continued providing a certain amount of *ghee* to the monastery.

The reason why I provide a detailed background of this landscape, its people and their livelihood activities, is to show how the community is socially and politically attached to these customary grazing practices and to a range of traditional institutions. But today, other than grazing, the Monpas are politically, economically and socially tied to the mainstream nation state. As mentioned above, over the last two decades, the Northeastern Himalayas emerged as a region for large energy investment and industrial projects. After Independence (1947), with the shift in governance from a traditional to a modern centralized governing system, the national

policies on infrastructure development, wildlife conservation, land rights, western education, and rapid economic growth have influenced the Monpas to venture into other socio-economic opportunities (explained in depth in chapter 3). Many of them are doing commercial farming, horticulture, doing government jobs, and are also engaged in daily wage labors like building roads for PWD, BRO and private companies. Thus, their socio-economic situations and living are undergoing rapid transformation (Farooque & Rao 2001). Despite their rich history and complex connection to the national economy, a popular image of the Monpas as remote people in a pristine mountain environment influences the way governments shape and implement policies that affect them and how conservationists approach the Himalayas as a region in critical need of environmental protection (Farooque& Rao 2001, Fratklin 1997, Goodall 2004, Sureja 2006).

2.8 Where it all began

A narrator's background should be made explicit when addressing such questions. My first memory of western Arunachal Pradesh is from almost a decade ago. My interest to work in Tawang and West Kameng district goes back to 2008, when I first visited the area as a tourist. My parents, being enthusiastic travellers born and brought up in a middle class urban landscape, enjoyed travelling to "remote" and "untouched" places to experience the culture, tradition and wildlife of that region. Arunachal Pradesh is one of the least travelled states in the country. Due to its poor accessibility, political disputes, and deprived infrastructure, the region did not attract foreign and domestic tourist until very recently. The "exotic" Tibetan Buddhist town is connected to the rest of the country by the Se La pass. The Se- la pass, otherwise called the *Se La*, is world's highest motorable high-altitude mountain pass (13,700 ft). With an elevation of 4,170 mt, the road was essentially built to improve the accessibility of the Indian army to reach

out to the inaccessible areas of the Indian side of the Indo-China border. The high altitude makes this region sparse in vegetation, but is surrounded by many perineal and seasonal lakes that feed into the rivers that originate in this region. Arunachal Pradesh was not an Indian state that was visited frequently. However, starting from the early twentieth century the larger media portrayed Arunachal Pradesh, especially west Arunachal Landscape, as a region that is rich in unexplored religious and cultural history, and is a beautiful landscape. “Arunachal Pradesh is so different from the rest of India. For the most part, Arunachal is unexplored so you still have places where no western tourists have been. It’s one of the least developed areas in Asia so there is a lot of virgin nature and local tribes living traditional lifestyles. For nature lovers, Arunachal is like untouched Shangri-La” (Christian, 2015).

Established on these ideas, tourism has started to flourish in Arunachal Pradesh. Today, tourism happens to be one of the main service-oriented sectors in Arunachal Pradesh and has to made rapid strides in terms of gross revenue and foreign exchange earnings (Chaturvedi, 2017). Harnessing the concept of “remote” “pristine”, the government started to push the tourism industry in the region. In chapter 5, I explain in detail how and why tourism is flourishing in Arunachal Pradesh, the role of local people in the industry and how they perceive of tourism in the present discourse of change. On my first visit to the landscape, I observed that the cultural and natural resources of west Arunachal Pradesh and the Monpas are the most important contribution to the tourist industry. Cultural and religious representations such as Tibetan monasteries, indigenous food, medicinal plants, cloth and accessories that are represented to the tourists are important aspects of their identity and attract tourism. However, what I did not realise was that the indigenous local people who are surrounded by the mountains had very little involvement with the tourism business in the region. In Tawang, there were only three hotels, a

government guesthouse and two privately-owned businesses, Transport, communication and overall infrastructural facilities were extremely poor. To enter the state of Arunachal Pradesh, one requires an IPL (Inner Line Permit), which is given to a visitor coming from outside of the state for a maximum period of 14 days and requires a renewal to extend the stay in the state. Though the landscape is picturesque, the one thing that all those travelling to Tawang and West Kameng will notice is that there is a strong Indian army presence and there is a palpable tension one can feel travelling to a contested border state. I did not go back to the region until 2013. After completion of the degree in microbiology, I went on to volunteer with the West Bengal Biodiversity board in other parts of the country to study community-based conservation practices among indigenous communities because at that point of time, one of the central government's aims was to incorporate the *People's Biodiversity Report* as a mandatory documentation in every state[14]. With the increased involvement in community-based conservation with the main objective of biodiversity conservation, my second visit to Tawang was for a different reason. I went back to the region this time not as a tourist, but as an intern/ student during my graduate studies at the Tata Institute of Social Sciences. With the keen interest in conservation biology and an academic background in Science based research and Developmental studies, I joined WWF-India, West Arunachal Landscape as an intern to understand the impact of developmental activities on the grazing grounds of Zemithang valley. The reason why I took up that project is because WWF has been working in that landscape for a very long time and they have successfully mobilised the community to build designated areas called the community conserved areas or CCAs in various villages of the Zemithang valley of Tawang district and Thembang village of West Kameng district.

14 http://nbaindia.org/uploaded/pdf/PBR%20Format%202013.pdf

With rise in concern over unsustainable developmental practices in the Himalayan states, and to conserve the biodiversity of the eastern Himalayas, the main objective of the organization has always been to help the communities conserve their natural resources, forests and wildlife. A rise in awareness among the local people, and the constant interaction with experts such as conservationists and wildlife biologists, some people, especially those who are educated, influential people within the local society started to take initiatives towards conservation of their landscape. The support of the organization, the villagers of these two villages declared a part of their forest area as a Community Conserved Area (CCA) with predefined sets of rule and regulation to maintain a sustainable usage of the natural resource. At present, there are two CCAs; one at Thembang with 31200 hectares in West Kameng District and another at Zemithang with 9800 hectares in Tawang District of Arunachal Pradesh. The villagers together with the village council have formed a CCA Management committee to look after the respective CCAs. However, when I say the community of these villages made this unanimous decision it means some people were and still are actively involved in this whereas many are indifferent towards these initiatives, because according to many conserving or not conserving their surrounding landscape does not affect their day to day lives and they are more busy in looking for work opportunity o sustain their living. Thus, as a part of a livelihood intervention in these villages that would provide income opportunities but also promoted as an incentive to the villagers for their contribution in conservation, the organization started community based tourism through the community based conservation (WWF 2017). Basic amenities like Home-stay and Home-restaurant were established with the direct or indirect support from WWF-India (WAL), the home-stay and home-restaurant operators, the guides, porters, pony-men; cooks were all trained by the experts of the tourism sector invited from different part of the country. The basic

infrastructure is available in both the sites which were first of its kind in this region. Looking through the lens of a conservationist and a wildlife enthusiast, I personally felt that it was a great initiative to be part off.

It was during the same time, I was being exposed to such initiatives and started to observe the way experts or outsiders are communicating with community members. I was also simultaneously collecting data to study the impact on the biodiversity on the grazing grounds by collecting samples near road constructions, shrinking of grazing lands due to army settlements, bridges etc. and I was also interacting with various community members and herders. A few people I spoke with mentioned their concern over the construction of dams. Uncertainty among the people in the valley was apparent, but agitation and concern was more expressed among the herders of Zemithang in relation to the Nyamjang Chhu hydropower project which was being planned on the river. During an interview, one of the Yak herders of Lumpo village said, "My concern is not about the roads that are being built or the bridges that are being constructed. Those developments are good! We need them, as it makes our communication with the rest of the world easier. We also acknowledge the fact that due to the Indo-China border we cannot access too many of our high-altitude community grazing lands anymore. But what concerns me is that if they build this dam it will submerge most of my grazing land in Lower-Soskten and Lumpo" (Personal Interview 2013).

On the other hand, when I met some local politicians, they were very enthusiastic about the dam construction. It was a hope among many people that this development would change the face of Zemithang and bring economic prosperity in the region. I remember documenting these concerns and perspectives, but at that time my research objective was not to understand the politics or the rise in contestation surrounding the dam, but rather how the "traditional

livelihood" practices like grazing were impacted by various developmental activities and what were the ways in which we as an organization could minimise them. Conservation-based organizations had no opinion regarding the building of the dams. But this dual perspective of the people started to raise questions in my mind. Questions like, why do different people have different point of views regarding the dam? Though conservation organizations have been working in this region for such a long time, why don't they have any opinion regarding the building of such large hydro-power projects?

During data collection in the summer of 2014, one of my colleagues joined me on a trip to the Zemithang Valley. Her research was on the National Rehabilitation and Resettlement Policy (R&R), 2007 (R & R Bill, 2007) in relation to the building of dams in Arunachal Pradesh. Zemithang happened to be one of her field sites. Through her research, she was enquiring as to how the government was undertaking the rehabilitation and recompensation process while acquiring private lands for the dams (the National Rehabilitation and Resettlement Policy have been discussed later in chapter 3). While working along with her and interviewing people regarding displacement, land acquisition and compensation, I also happened to meet Lama Lobsang Gyatso, the leader of the Save-Mon Region Federation, a religious based anti-dam activities group from Tawang. He was at that time also a Lama/ Monk at the Tawang Monastery. However, he was quite involved in the anti-corruption and dam movement, which is why he had to step down from practicing the life of a Lama and had completely immersed himself as an activist. By the end of 2014, when I completed my thesis, I got an opportunity to work at WWF-India as a full-time employee. But, while working with the organization, I was in contact with many of my friends and colleagues from the Tawang and was informed about the negotiation process and various events taking place in the region in regard to the building of the dam. Even

the conservation action started to gain momentum in the region. I could, at that point conclude that the contestation against dams is more than just the impact of developmental activities on the traditional livelihood of the community. Working with WWF helped me understand how conservation is practiced in India. I not only developed and learnt the skill to work with different communities and organizations, but also in these three years I met and communicated with various actors to implement conservation strategies in different landscapes. This helped me to develop skills to interact with players at both local and international levels, and I learned that, if a speaker wishes to successfully produce discourses in a field, then he or she must observe the forms and formalities of that field. It was clear that whenever different players speak on an issue they must adapt their speech to the demands of the linguistic field that is their audience. In this process, the voices of some players get suppressed and others become more powerful or dominant. Bourdieu (1991) argues that all speech acts must be understood as a product of the relationship between a person's "linguistic habitus" and the "market" that constitutes the speaker's audience. In 2015, I made a conscious decision to do my second masters degree in anthropology because it was a discipline that promised to help me interpret the "actions" and "processes" of doing science. I learnt that anthropology is an integrative and comparative discipline that gives scope to both theory and geography and aims at the integration of social process that other disciplines often isolate and treat as separate and distinct for the purposes of study and analysis.

2.9My Journey as an Ethnographer

In recent years, apart from anthropology, there is a growing body of literature that shows how different disciplines have been adopting ethnographic research methodology to research the

concepts of “resilience” and “vulnerability”, “climate change”, and “development” within the complexities of human and environment relationships (Crate & Nuttall 2009; Shaw 1992; Adger 2006; Anderson 1968). Ethnography-based field work allows researchers to accumulate evidence that cannot be documented only on a certain set of questionnaires and interviews. The extended period of research among the people of the community helps researchers to engage in their daily lives and activities. Observing and participating in their social lives has helped researchers to recognize knowledge, perceptions and behavior related to environmental change (Crate & Nuttall 2009). Hammersley and Atkinson (2007) state that one of the main bases of social science research is the ability to reflect upon ourselves and our actions while undergoing ethnographic fieldwork. During my fieldwork I used various ethnographic methods such as participant observation, informal interviews (Whyte 1960: 352), group interviews and focused group discussions to conduct my research.

Most anthropologists largely accept that ethnography is still grounded in a long-term slow process of research and data collection in the field. However, many times researchers do not get the opportunity to spend long periods in the field. Pink’s ethnographic work (2004, 2013), provides a contrasting model, where ethnographic field work is short and intensive in nature. She says, that several repeated visits to an ethnographic place over a period enable us to picture processes through a wider vision. She adds that short term ethnographic research also assists the researchers to be extremely focused and reflexive in nature. At the same time, it is important for me to understand that, in such a short period, reflecting on the methods of my field work and developing ideas based on that, will arise from more of a “systematic point of view”, derived from various theories, literature and field experience, rather than a personal point of view, which can develop only with a long-term engagement with the community. Thus, this also provides an

opportunity to evolve a dialogue with theory rather than being led by a structured theory. Since I had some history with the region, I decided to follow this path.

2.10 The Spontaneity of Ethnographic Research

My journey to India on 11thMay 2016 for my fieldwork began with a strong feeling of uncertainty. With the Indian newspapers constantly reporting the after effects of a shooting in Tawang on May 6th, and the blocking of roads due to the landslides caused by the heavy early monsoon rainfall, I was apprehensive about reaching my field site at that time. As I was a former employee of WWF-India I was still in contact with them. Prior to my fieldwork, I contacted them asking for logistical support in the area. Hearing about my research ideas, they were quite interested and willing to help me as they felt my ethnographic research could also benefit them to reflect on their CCA initiatives from an ethnographer's point of view. The day after I reached Delhi, I learnt that my travel to West Kameng and Tawang would be delayed. WWF was organising a three day-long legal workshop on environmental conservation in Tezpur, Assam (the gateway to Tawang and West Kameng) on the day of my planned travel date. This workshop was aimed to bring in lawyers, community members, researchers, WWF-India employees and government officials together in one platform and help them to understand the legal loopholes and the knowledge gaps among conservation practitioners and environmental law. This was my first hindrance at the beginning of my fieldwork, when I realised most of my travel plans were dependent on someone else and my ethnographic enquiries could be restricted because of this. This was, in many ways, my first lesson about anthropological fieldwork and the need to be flexible and patient. Some of my colleagues at the University of Alberta asked me whether it was a good idea to work under the umbrella of the NGOs to get access to my field site. I remember

discussing with my colleagues and my supervisor that my main concern was that the way people should see me when I returned to Zemithang as an independent researcher and not as an employee. However, there were a few ways I began to rationalise my positioning as a researcher.

2.11Access to the field and research personnel

One of the most critical aspects of a first-time ethnographic research period is to obtain access to the field area, as one cannot fully anticipate the difficulties prior to the fieldwork (Feldman et al. 2003). In most cases gaining access is a practical matter. However, even if a researcher receives physical access to the field, overcoming obstacles such as language and acceptance within the social community can be a difficult and time consuming task (Hammersley & Atkinson, 2007). In the case of my study, due to my previous visits to the region, having a common communication ground, and having worked with WWF's local office, I was able to build good working relationships with members of the community and I have made sure to maintain the relationship with them through telephone, social media, and emails. However, as mentioned before, this field visit was extremely critical for me, as I was going there as a researcher and not as a practitioner or an intern in the organization. I initially thought this to be problematic to my research because it could have brought bias to research, which is because I realized I had to be careful about people's reactions time, as they may or may not have changed their perception of me with the change in my role as a researcher. At the same time, since my research questions also enquire different perceptions of human-environment relationships among different actors, such as government officials, livestock herders, community members, corporations, etc. I decided to maintain a very "marginalized" and "outsider" position to keep a cordial relationship with different actors in the field. I was also conscious about the settings in

which I will conduct my interviews with different respondents. I knew the area has undergone many political changes in the context of the dam, and that this project has triggered conflicts among local people in the region. As I set out, there were possibilities that the region was still quite volatile and problematic. Thus, I realized that working under the umbrella of a conservation-based organization could be an advantage to my study. With the help of local organizational supports, I grasped that I would be able to initiate contact with personnel or "gatekeepers" (Cassell 1988 and Hoffman 1980) who could help me negotiate my options and help me understand the settings and boundaries that could easily help me engage with my respondents.

2.12The Information Collection Process

Developments in technology have had a major impact on ethnographic research. Traditionally the primary ways of investigation in an ethnographic research process were the collection of various kinds of secondary data like documents, maps, artifacts, archives and primary data, such as documentation and writing of oral accounts of people during interviews and participant observation. However, with time and development in science and technology access to various forms of data as well as storage of such information has become much easier and accessible for researchers (Hammersley & Atkinson 2007). Since this research has been primarily based on different forms of interviews and participatory observation, understanding the local language is crucial. Even if one understands the local language, understanding the local dialect cannot be taken as a given unless one goes to the field and interacts with the community (Ellen 1984). However, in case of my research, due to my earlier visits in the region and since I can speak and write Hindi, which is spoken widely throughout Arunachal Pradesh, I was quite

confident about interacting with people through this language. However, I knew that many senior members of the community do not speak Hindi and can only speak Tibetan or Monpa, languages that I can comprehend, but cannot speak. For this reason, I started to learn the local language so that with the help of technology like an audio recorder, I could record conversations that I later translated and analyzed. But many of my respondents did not wish me to use a tape recorder during an interview. Even though formal consent was signed before the interview some people were apprehensive about it. A few of my respondents also refused to sign the consent form and provided the consent verbally, which I recorded. When I asked why they were not willing to sign the consent form, one of them respondents reacted scared and said they had a bad experience earlier with signing forms. Thus, while doing my unstructured interviews I was very careful on where to place the audio recorder during an interview and how I would take notes during or after the conversation.

Using different equipment like a camera for photographing, audio recorder, writing oral accounts, artifacts, documents etc. were important during analysis and respondents' validation of material (Hammersley and Atkinson 2007, p. 182). In addition to my own experience and knowledge of the context and data, the other sources of evidence like attending workshops, meetings, events in local community halls were important as it help me to understand the scenario better. Triangulation of all the above sources of information was my main strategy to verify and validate my information.

Getting a chance to participate in events like workshops, conferences, meetings, is a treat for an ethnographer. To have various stakeholders in the same place, observe them, interact with them, helps us to observe social interaction in both formal and informal settings. As I was waiting in Kolkata for the workshop to get over, I concluded at that point that there was no

reason for me to stay in the city until the end of the workshop. Since the members of the organization are my gatekeepers, I felt I must seize every opportunity that I had and be flexible with my original plan. I wanted to be part of the workshop and in fact I wanted to participate in it. After I contacted the landscape head of WWF-WAL, the organization being extremely supportive immediately agreed for my participation and presence. They also agreed that I could interview stakeholders and different participants in the conference. Hammersley and Attkinson also state that "sometimes, belonging to a different ethnic or national group can even have distinct advantage. Age is another important aspect of the fieldworker's persona. Although it is by no means universally true, there appears to be a tendency for ethnography to be the province of younger research workers. In part this may be because the younger person has more time to commit to the fieldwork; in part, it may suggest that junior people find it easier to adopt the 'incompetent' position of the 'outsider' or 'marginal' person." (Hammersley and Attkinson, 2007).

In terms of gender and age, I experienced a similar situation in my research settings. Every time I was part of any meeting or workshop, I realized my role as a student automatically put me in a marginal position. I preferred to use the word "student" over "researcher" because the word 'researcher' was very ambiguous and suspicious for people. Due to the political volatility of the region, many of my respondents were hesitant to talk to me when I said that I was a researcher. I remember a particular incident very clearly during the second week of my stay in Zemithang Valley. I was returning from Lumpo village, which is approximately an hour of a car ride from the place I lived. While returning, my friend and I decided to walk back because the road was downhill. It was almost dusk by the time we reached home and I saw a man waiting at my doorstep. He seemed to be a stranger, not a common face in that locality. In that

community, even though most of the people in the area are of the same national groups, someone who does not belong to the same ethnic group is automatically considered an “outsider”. Living in that area for a long time does not change this notion in any way because those people are still identified by their ethnicities like,“Nepalis”, “Marwaris”, “Apatani”, instead of just being called “Monpas”. Most of these “outsiders” are in the region because of government jobs, small businesses, army, daily labor etc. The reason why they cannot be one of the Monpas is because owning property like land, agricultural fields, or assets like livestock, is nearly impossible in the area. My friend happened to know who he was; he was from the Special Investigation Bureau[15] and was newly posted in that region. As I approached the door, the man looked at me and asked if he could come inside to ask me some questions. From our initial conversation, where I introduced myself as a graduate student from the University of Alberta working in this landscape as a researcher for my master’s thesis, on the development of dams and the socio-economic scenario in the region, he picked up only two key words from the whole conversation- “Dams” and “Researcher”. This was followed by a long suspicious enquiry about the purpose of my visit, why I was studying in Canada, why I was interested in dams, whether I was carrying a GPS and taking the GPS location of the region, how many people I had spoken to and to whom did I want to speak to in the future. From this interrogation session, I understood that from the future I needed to maintain a marginalized position. To be able to work in this landscape I had to start attending more community events and workshops instead of speaking to people in person to make myself look more suspicious. Moreover, I had to stop using the term “researcher” and use the word student instead Though, I was an Indian and of the same nationality as the Monpas, in my field of study I am popularly viewed as a “native” anthropologist. But in this case, I also

[15]The **Intelligence Bureau** (**IB**) (Devanāgarī □□□□□□ □□□□□, *khūphiyā vibhāga*) is India's internal intelligence agency It was recast as the Central Intelligence Bureau in 1947 under the Ministry of Home Affairs

learned it was not an advantageous position for me to be in. One of the other items on my agenda was to meet a few of the herders I knew and spend a week in the high altitude grazing grounds with them as I have done during earlier visits. But with the change in my designation, from a WWF intern to an independent academic, I was not able to do that. To go to the high altitude grazing grounds that border China or Bhutan, I had to obtain permission from the army. WWF has been working there for a long time and has built a very good relationship with the army. Thus, while I was working there earlier as an intern it was not my responsibility to apply for permission to visit the area. With the change in the setting and my role as an individual academic from an intern, I was denied permission to visit the high altitude grazing grounds. Ethnographers, who like me, struggle with the fixation of labelling oneself as either a "native" or "non-native", believe that each anthropologist should be identified in terms of shifting identifications among a field of interpenetrating communities and set of power relations (Narayan 1993, 671-686).With all the above experiences, I decided to stay in the busy and active part of the town to connect with as many people as possible, in order to get adequate information. Before I discuss my ethnographic experiences in relation to dams, in the next chapter, focusing on the Nyamjang Chhu Hydroelectric Project (NJC-HEP) in Tawang district of Arunachal Pradesh and on the Monpas p, I discuss the contextual resource politics of the project, where I reveal some historical and contemporary issues to explain the marginalization of people and the growing resistance movement by local people against large dams is democratizing the region.

Chapter Three

Untapped Hydro-Power:

Energy development and resistance movements in Arunachal Pradesh

Fig 5: Site of the Nyamjang Chhu Hydropower Project

3.1 The Nyamjang Chhu Project:

Of the 143 projects planned to be built in Arunachal Pradesh since 2001, the Nyamjang Chhu Project is the largest of the 13 hydropower projects in the Zemithang Valley and was funded by LNJ Bhliwara Group, a textile and steel company. This 780 MW of HEP envisages construction of a 10.2 high and 15m long barrage on an eco-sensitive stretch of the Nyamjang Chhu River (WWF, 2013). The total land proposed for the project is around 254.55 ha, of which

10.08 ha is private land owned by individual households/landowners and 244.46 ha is owned by the villages or Monastery in form of communal ownership and used for agricultural and pastoral activities. The total submergence area for the dam has been estimated to be around 39.34ha and 89.5271ha of forest land for the diversion proposal under the Forest (Conservation) Act, 1980.

When the dam was commissioned in 2006 a majority of the people in the region were enthusiastic about the proposed plan. Since the country's hydropower sector had planned for a long-term development, promises were made by private companies and the state to improve the region's living conditions through new ventures, job opportunities and overall development. Most of the Monpas in the region are Buddhists and have a strong religious attachment with the Monastery (Srivastava & Ramchandra, 2016). Keeping the environmental concerns in mind, even their spiritual leader, Late TG Rinpoche's optimistic view about the hydro power projects encouraged the local leaders to push the project forward. During a conversation with one of the villagers from Lumpo village, he mentioned "we trust our Gaon Bhura (Village headman) a lot. He is knowledgeable, spiritual and a wise man. He is also a friend of our religious leaders. When the dam was first proposed, even he was quite excited about the development, but I remember he was also quite sceptical because we had many questions which were not answered and a lot of the information was murky, it was not black and white" (Personal Interview, 2016)

3.2Scoping Stage

Due to the size of the project, Nyamjang Chhu fell within category 'A' as per the EIA (Environmental Impact Assessment) notification (Ibid, 2016). In that case, for the project to be launched successfully, a three-step process of scoping,[16] public consultation[17] and appraisal was

[16]Scoping, or the determination of the Terms of Reference (ToR) for the EIA study by the Expert Appraisal Committee (EAC), an independent body of experts constituted by the MoEFCC

mandatory to obtain environmental clearance from the nodal Ministry of Environment, Forests and Climate Change (MoEFCC). The ministry considered the project proposal and prescribed Terms of Reference (TOR) for the preparation of the Environmental Impact Assessment (EIA) report. The Central Electricity Authority (CEA) assessed capacity of the project based on hydrology and discharge data approved by the Central Water Commission (CWC) and thereupon the capacity of the project was reduced to 780 MW from 900MW.WAPCOS Ltd. and RS Enviro link Technologies Private Ltd were commissioned to carry out the EIA for the proposed project and they undertook the studies in 2007-2008 (NCF, nd). Biodiversity survey conducted by a non profit research based organization Natural Conservation Foundation in 2004 reported on the presence of 35 mammalian species, of which 3 were listed as endangered and 4 as vulnerable and the report also listed the presence of 150 bird species (Mishra et.al, 2004). The EIA report however failed to list many of the species in the region like the Himalayan marmot, Orange-bellied squirrel, pika etc. Since most of the biologically significant areas in India are categorised under protection like national parks and wildlife sanctuary, the rationale provided by the EAC team was that the Nyamjang Chhu project was not going to impact the biodiversity of the region because Zemithang is not biologically significant enough to be protected. The EAC for hydroelectric power projects has never exercised its power to reject project proposals at the scoping stage. Rather it has chosen to ask proponents to reformulate faulty proposals rather than reject them outright (Srivastava & Ramchandra, 2016 p. 55-56).

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[17]Public consultation, or the ascertainment and inclusion in the project design of all material concerns of the local affected persons, and others who have a 'plausible stake in the environmental impacts of the project'

3.3The Public Consultation Process

The study conducted by the EAC, followed by the public consultation process were two of the most vital characteristics of the EIA. Due to the rush of acquiring the long awaited autonomy, though, the state government along with the developers did not follow the mandatory processes. Thus, the process of compulsory public participation also happened to be flawed. Not only were many of the locals misinformed, but information and awareness regarding the public hearing did not reach the villagers at the right time. Quoting one of the information, "people were not very concerned about the negative impact of the project on the flora and the fauna until today. The optimistic point of view started to revert after the community started to feel socially and economically marginalised" (Personal interview; 2016).

As per the prescription under the Environmental Clearance Regulations, 2006, public hearing was held in New Lumla on the 8th February 2012. On 22nd February 2012, the Arunachal Pradesh State Pollution Control Board (APSPCB), submitted a detailed report of the public hearing to Ministry of Environment and Forestry (MOEF). The EAC in the Meeting held on 26th March 2011 (48th Meeting) and on 16- 17th September, 2011 (52nd Meeting), considered project proposal and in April 2012, the EC was granted by the MOEF (NGT, 2016).

In 'public consultation' the concerns of Local Affected Persons (LAP) and others having plausible stake in environmental impacts of the project or activity, are taken in account. 'Public consultation' comprises of 'public hearing' at the site or in its close proximity and obtaining responses in writing from there concerned personnel, who have a plausible stake in environmental aspects of the project. To obtain these responses, the concerned Regulatory Authority invites responses from such concerned persons by placing on their website, a summary of the EIA Report prepared in the format given in Appendix 3-A, along with a copy of the

Application in the prescribed format within seven (7) days of receipt of written request for arranging ‘public hearing’. The Regulatory Authority is under obligation to make available on written request from any concerned person, a draft of the EIA Report for inspection during normal office hours. Procedure for conducting ‘public hearing’ given under Appendix IV of the Environment Clearance Regulations, 2006, proposes arrangement of ‘public hearing’ in a systematic, time-bound and transparent manner, ensuring widest possible public participation at the project site(s) or any area close to the project site . It requires a draft EIA Report, including the summary of the EIA Report in English and in the official language of the State prepared directly in accordance with TOR and available for inspection, electronically or otherwise to the public providing thirty (30) clear days for the public to furnish their responses. All the responses received are forwarded to the Applicant who is obliged to address all material and environmental issues, concerns, costs during the process and make appropriate changes in the draft EIA and EMP to prepare a final EIA Report. (MEF, 2006).

But in this case of the public hearing, it was held in Lumla, which is the headquarters of Lumla circle of which Zemithang valley is a part. However, the distance from Lumla to villages in Zemithang Valley, ranges from one and a half to four hours by car depending on the weather, conditions of the roads, and the distance of the village from New Lumla. Almost 90% of the households in the region do not own a motor vehicle, but even if they do it is very expensive to commute. 300 people attended the hearing. Out of 700 households that are affected, only 41 households from Zemithang attended the hearing (the main area where people are directly affected by the dam). As mentioned above, public hearings should generally be conducted in the region closest to the area of construction or near the people who are directly affected, according to some local people from Kharmen village in Zemithang Valley; they did not even receive prior

notification regarding the hearing. According to local daily wage labourer residing in Kharmen village," we were not even aware of the hearing. Also, the few people who went from Zemithang, they belong to a political party (people who have close relations with the local elites or politicians). They were specifically selected and are corrupted. They got money to go and they are pro dams; at the end of the day it is all about money!" (Personal interview, 2016).

Despite all the above issues the environmental clearance was granted on 24th March 2011. While trying to document all the legal processes and policies, I realised that I was not very aware of many legal terms and practices myself. One of the reasons why the number of appellants is so low, considering the concerns and interests of civil society, social groups, NGOs, and working groups, is because most of these legal terms and rules are rooted in the European legal tradition and most of the local people or civil society groups are not completely aware of the process. Also, most of the times governmental language is very jargonised which makes it difficult for common people to keep up with. Other than English and Hindi (the two official languages of the country),even if the government documents are translated into local languages, there are only 22 scheduled languages in which these documents can be translated and none of these languages are from Arunachal Pradesh.

3.4 Government Language, Jargon and Simplified "Expert" Knowledge

Though the earliest presence of Christian preachers in Asia goes back one and a half millennia, the earliest form of a Euro-centric education system arrived in Northeast India through the Christian missionaries in the nineteenth century under colonial rule (Michaud et.al. 2016 p. 103). Historians and anthropologists have documented that missionaries often accompanied

European colonial troops even in other parts of the world. It has been understood that one of the crucial roles of missionaries was to take over operations in isolated areas by quickly adapting to the local language, culture, and gaining influence among the indigenous and local populations. In the case of a region such as Northeast India this was mainly done to secure mountain borderlands and their peoples who were known to be culturally and socially distinct from lowland majorities. Though they were successful in attempts to influence many Northeastern tribal communities in Nagaland, Manipur, and Tripura and to convert them to Christianity, they failed to do the same in Assamese Hindu areas as well as places where the majority belonged to Buddhist groups (Michaud et al. 2016 p. 103).Though education and health are two of the major tools used to "civilise" tribal communities, they were not very successful in setting up many educational institutions or infrastructure to develop the region. Thus Euro-centric forms of education started to influence the region under the post-colonial national policy for education in India. In most cases in India today, the curriculum is the same for all citizens and the national language is the norm in schools. After independence, Dr. Ambedkar[18] proposed Sanskrit as the national language of India. But, India being so diverse and having so many languages did not choose to have a national language. The official languages of the Union Government of the Republic of India are Hindi and English as per article 343/1 of the Constitution of India (Windmiller, 1954). Out of 200 languages, the Indian constitution has officially recognised 22 scheduled languages of which only two languages are recognised from the Northeast are Bodo and Assamese. Many of the tribal languages from Northeast India do not have a written script. Other than having distinct socio-cultural structures all the tribal communities have distinct languages. According to the Indian language classification, the region has people of Mongoloid stock, speaking Sino-Tibetan

[18]Dr. B. R Ambedkar: After India's independence on 15 August 1947, the new Congress-led government invited Ambedkar to serve as the nation's first Law Minister. On 29 August, he was appointed Chairman of the Constitution Drafting Committee, and was appointed by the Assembly to write India's new Constitution

and Austric languages or dialects. According to Rajesh Verma, the linguistic metric of the region is made up of number of polygots. It is not only different languages of a single family but also languages of different families which are spoken in different states of this region as each state is a multilingual complex rather than linguistically homogeneous (Gupta, 2016). For example, if one visits Kohima,[19] which is one of the main business center towns of Nagaland, people can communicate in a colloquial language which they call *naga*. That is known to be a vernacular that has developed over time, as people from lowland areas started to mix with people from highlands through trade and business and developed a common language. However, different tribes have their own language that is passed down from one generation to another orally. Many states like Manipur, Assam, Tripura have adapted Bengali scripts with slight modifications. Even if the central government promotes regional vernacular languages in their academic curriculum in each state along with English and Hindi, in Northeast India that is not quite attainable. But, even though under the national and provincial government, the primary schools and a few secondary schools in the villages in every district try to promote education both in English and Hindi, in reality, the medium of teaching is quite different. Only 6% of the total Indian population pursues academics beyond secondary education, and these are the people who are the decision makers in the government and opinion makers in the society (Kaur, 2013), who are often unaware of the micro-level realities of the socio-economic and cultural structures of the hill communities. Due to poor accessibility and poor infrastructure, most of the public-school teachers in rural India do not have University degrees. Therefore, the quality of teaching is also quite poor. On the other hand, even if there are more than 30 languages that have been

[19]Kohima: is the hilly capital of India's north eastern border state of Nagaland which shares its borders with Myanmar. With a resident population of 267,988 it is the second largest city in the state. Originally known as Kewhira, it was founded in 1878 when the British Empire established its headquarters of the then Naga Hills. It officially became the capital after the state of Nagaland was inaugurated in 1963

recognised in Arunachal Pradesh, in comparison to its neighbouring states of Nagaland, Manipur and Assam, 90% of the state speaks Hindi. The popularity of Hindi as a second language can be supported by a combination of historical factors and strategically implemented central governmental policies. After the Indo-China war in 1962, Arunachal Pradesh came under high security and surveillance. Along with this, Hindi became purposefully implemented language in the region through various ways, especially through the school curriculum. Since the language is largely spoken in central and lowland India, and since Arunachal Pradesh is a border state, among many other strategies (discussed later in this chapter) language was used as a tool for nation building. Attempt was made for the language to be imposed on the people over a short period of time, which is why a local dialect developed. For example, when I first visited Tawang, though almost everyone could speak Hindi, I had a hard time understanding their version of Hindi. Words like *baithega* which means "sit" in Hindi, means "stay" or "live" in Arunachali Hindi. It also means "give up" or "given up" depending on the situation. Thus, even if the teachers in public school teach the curriculum in Hindi, they speak in the local version of Hindi. English medium public schools are not very common. In recent years, private schools are mushrooming in rural India because of the poor performances of public schools and in many of them the medium of instruction is English. However, unless it belongs to a large organization that receives a lot of funding, the quality of education is very poor. Teachers, often coming from the outside and belonging to the national majority, are difficult to recruit and retain in their highland postings due to the adverse effect of remoteness and the pervasive highland-lowland dichotomy. Among Buddhist families, especially among the people in Tawang district, one of the children from the family is sent to the monastery to become a monk. Tawang Monastery has an establishment called the Centre for Buddhist Culture, where children attend primary and

secondary school. Along with modern or western courses like science, English literature, math, history, Hindi etc. students also learn Tibetan language and culture. These are residential schools, and students live under the supervision of a senior monk who is responsible for their guidance and training. Many of them who want to pursue higher education go to different cities like Bodh Gaya, Varanasi, and Bengaluru where there are larger monastic establishments and universities that offer these courses. Thus, most of the government officials or decision makers in the region are outsiders. Interestingly, even if there are Arunachalis who are government officials in the region, they are mostly from eastern and central Arunachal Pradesh, parts of the state with more access to the centre because of geographical location and closer to Itanager which is the capital city of the state. In one of my conversations with the Apatani[20]Circle Officer of Zemithang Valley, he says, "well, you know that these Monpas are very innocent and not very educated. They are happy with their everyday labour work and drinking at night. They are happy in this setting and not much interested to see the world. On the other hand, we Apatani people are much more driven and we study hard, go to University to get a government job." (Personal Interview, 2016).

Thus, with all the above setbacks a very small parentage of the population in this region are formally educated, and the people who are decision makers are either outsiders or from a small elite section of the society, making the decision-making process very exclusive. This is why, even when corporate, developers, conservationists, scientists try to communicate with the local people; they tend to distil or simplify the "knowledge" thinking the local people will not understand the language of formal education.

[20]Apatani: The **Apatani**, or **Tanw**, also known by **Apa** and **Apa Tani**, are a tribal group of people living in the Ziro valley in the Lower Subansiri district of Arunachal Pradesh in India

In the last five years, only three of these appeals against developmental activities from local communities all over the country were taken to the higher court and only two of them were challenged in the supreme court, making the Nyamjang Chhu project the first hydropower project to be halted on the grounds of environmental protection outside a protected area in which the community played little or no role (Riwick Dutta, lecture at Tezpur, May 21st 2016). However, since there are various perceptions amongst people concerning the construction of the dams and the use of resources, this has helped in shaping the multilevel discourses of social environmental and political conflict in the region. The rise in conflict surrounding dams that stems from a marginalised feeling within the community catalyzed the whole process, which is explained in the next section.

An understanding of Arunachal Pradesh's geo-political and administrative history is vital in order to recognize the relationship between decision-making and structural power dynamics. The rush to build these projects was possible not only because the region had the potential to generate hydropower energy, but because the socio-political structure had been historically shaped by various events in a manner that has given political and social elites complete authority over decision-making. Unlike many other parts of Arunachal Pradesh and Northeast India, where resistance is prevalent as an opposition to power, west Arunachal Pradesh has previously been represented as a pristine landscape – free from agitation – where communities practice Buddhism and live in harmony with their surrounding environment (Sureja, 2006). The region has undergone a process of democratization and modernization. Increasing interaction with different actors, increased exposure to knowledge and information related to developmental activities, and a process of marginalization has sparked curiosity, uncertainty and confusion among people. However, hegemonic traditional and religious institutions that always had an upper hand in

shaping communities' social and cultural structures, insulated communities from getting involved in the modern democratic ways of decision-making. This is the point of interest of an anthropologist to identify the drivers that led to the resistance movement in Tawang surrounding the Nyamjang Chhu hydropower power project.

3.5 Nationalization of the Northeast Himalayan Frontier

Post-independence, the relationship between Northeast India and the rest of the country, especially the government and administrative centres, started to change. The concept of the Northeast was formalised politically and the term become popular with the formation of the Northeastern-Council (NEC) in 1971. The history of the Indian nation-state is often referred to as the integration of diverse ethnic groups. Different methods were used to integrate the princely states of Manipur and Tripura and the adjoining hill areas of Assam, which constitute the present day Northeastern region. The rationale for political integration is that there is a need to create a 'territorial nationality which overshadows – or eliminates – subordinate parochial loyalties' (Sherma, 2007 p. 329; Weiner, 1965). These local allegiances, or the similar primordial attachments, impede development since the national leaders, aspiring to expand the functions of the political system, need the undivided loyalty of the entire population. It is, therefore, one of the challenges for the political system to bring about 'the process whereby people transfer their commitment and loyalty from smaller tribes, villages, or petty principalities to the larger central political system' (Haokip, 2012; 304). According to Myron Weiner, political integration is the 'integration of political units into a common territorial framework with a government which can exercise authority' (Weiner, 1965). Ernst Haas (1958) defines it as the 'process whereby political actors in several distinct national settings are persuaded to shift their loyalties,

expectations, and political activities toward a new centre, whose institutions possess or demand jurisdiction over the pre-existing national states'. Karl Deutsch uses the term integration both as a process and a condition and defines political integration as 'the attainment of a sense of community, accompanied by formal or informal institutions or practices, sufficiently strong and widespread to assure peaceful change among members of a group' (Deutsch, 1954).

Right after independence one of the objectives of the central administration was to reorganise the states of the country. However, under the prevailing circumstances the country had then to face more serious issues of defence, refugees, food security, inflation and economic production, redistribution of the states required a great deal of preparation and planning for which there were not many qualified personnel to undertake this job. At this stage the commission also felt that emphasis should be given primarily to administrative convenience like language, history and economy. At the Nagpur session of Congress, 1948 a committee was appointed that warned the commission against the division of the provinces based only on linguistics, as it might create communal differences in the future. Despite such a discussion, the Government of India went ahead with the scheme of reorganising the states on a linguistic basis (Kandadai, 1986). In a federal plan, advocates of linguistic division emphasised on the fact that language unites people and simultaneously linguistic principles bring exclusiveness to a region. But critics say, that what policy makers failed to understand is that India being such a multi-racial and multi lingual country could be prone to racism, linguism, parochialism, violence and killing. Evidence of this was seen in different parts of the country, especially in Northeast India. Since the majority of Northeast India bordered other countries like China, Myanmar, Bhutan, Nepal and Bangladesh, the commission wanted the Border States to be well administered, stable

and resourceful units, so that during military emergencies the states are prepared. It was recommended that the new state of Assam should include the existing areas of hill states including Tripura. Though most people spoke Bengali in West Bengal, West Bengal was not ready to merge under the state Government of Assam. So, the State of Assam consisted mainly of today's Assam, Naga Hills, Mizo Hills, Tripura and Manipur, and NEFA (Northeast Frontier Agency). NEFA (today's Arunachal Pradesh) on the other hand was treated separately or in other words specially because it was a frontier state and bordering China. During this time, an interesting administrative turns over changed the whole socio-political discourse of Northeast India. Since most communities residing in the region were Hill Tribes, they demanded special provision for hill states because of their socio political aspects that were quite different from low land India. In response to this demand the commission had a strong opinion that all the hill districts will not be able to mobilise, despite reasonable grants from the centre, the necessary resources, to implement successive developmental plans. Policy makers understood that separation will add to the cost of administration and policy implementation can be difficult. Moreover, other than some hill districts, Garo, Khasi and Jayanti would be in the favour of separation. With all the different demands, the centre decided Assam and other hill areas, like Naga Hills, Garo Hills, Lushia Hills etc. were regarded as a state, Tripura and Manipur were made Part C states under the Indian Union and NEFA (Arunachal Pradesh) was retained as a frontier agency and later turned into union territory of Arunachal Pradesh (Haokip, 2012). To maintain tribal integrity and to filter constant interaction with lowland and hill states, Inner Line Permit was introduced. Administrative heads of the districts were D.C (Deputy Commissioner) who was responsible for the welfare of the state and bridge gaps between the states and centre. . The constituent assembly set-up an advisory committee to aid in the decision-making processes

for administrative and economic development in the tribal regions. With time and constant interaction with the community leaders and the village headmen the advisory committee suggested autonomous districts and a regional council would be a good way to safeguard tribal land, respect their customs, language and culture. Adopting from American legal framework, Dr. BR Ambedkar suggested that district and regional council should be created to safeguard the tribal laws and land. The constitution promulgated in 1950 contained a special provision called the sixth schedule. The sixth schedule was for the administration of tribal areas specially hill tribes. Under the sixth schedule the administration of Assam was divided into two parts. Jainti Hills district, Garo Hills district, The Lushia Hill district, The Naga Hills, the North Cachar and the Mikir Hill district became part of an autonomous district administration by the government of Assam, where the frontier tracts, Mishmi Hill districts, and Naga Tribal area came under the administration of the governor of Assam, who was also the acting agent for the president. Tripura and Manipur became administrative regions under the central government, and NEFA remained a separate entity. With the increase in military, administrative and legal involvement, the newly formed central congress government started to engage more with the community. In order to quell the various ethnic aspirations, new states started to separate and were carved out of Assam: Nagaland (1963), Meghalaya (1972), Arunachal Pradesh and Mizoram (1987). Nagaland had a very conflicting history because some parts of Naga Hills were in NEFA, and some was part of Naga Hill districts and so on.

Interestingly Arunachal Pradesh was the only one state where the shift to statehood was peacefully executed (Haokip, 2012 p. 308). The area was upgraded to become a Union territory of in 1972 and finally in 1982 it became a state. Inoue (2005) states that the promotion of Arunachal Pradesh to state was an indication to China that the nation is integrating their

frontier.Since 1950, building large dams has evolved as a crucial tool for India's post-independence nation building (Biswas & Tortajada , 2001). During the Nehruvian era, fostering the "scientific temper", the dream of transferring agrarian India into a powerful industrial nation was put into force (Arnold, 2013). In July 1954, Prime Minister Jawaharlal Nehru inaugurated the second highest dam, the Bhakra Nangal dam in Punjab that he called the "temple of modern India" (Morrison, 2010). Dams became a symbol of the country's scientific progression and modernization and were identified as a huge source of power generation for the entire nation. Known to be a source of clean energy, hydropower emerged as a viable alternative energy source to hydrocarbons and coal (Gogoi, 2011). However, until the 1980s, policies to build mega dams were restricted to central India. After 1990, India's economic growth was hindered due to acute power shortage and the country's frontier became a potential site for the construction of mega structures for the expansion of modernity. (Ibid, p. 1-2)

Sanjib Baruah highlights this development as the "nationalizing of frontier space" (Baruah, 2003). Prior to 1990, national policies indicated that the big dams and the heavy industries were not to be developed in states like Jammu and Kashmir, Arunachal Pradesh, and Sikkim because of each region's proximity to hostile neighboring countries. However, after the post-Chinese aggression in 1962 in the Tawang and Kameng frontier area, earlier part of Northeast Frontier Agency (NEFA) exposed India's vulnerability in the region. J.P Dalvi, a commanding officer of the Indian 7th Brigade during the Sino-Indian War, and author of the book, *The Himalayan Blunder,* says that the Chinese invasion in India through NEFA took the Indian government by complete political, diplomatic, and strategic surprise. With the lack of overall political objective, no national policy, and no strategy for military operations in the

Himalayan region, India's defeat shook the nation's international and domestic politics and economic progress (Dalvi, 2010 p. 2-4)

The Nehruvian policy in Arunachal Pradesh was based on the two British elements of isolation. The colonial "inner line" policy filtered people from main land India to certain hill tribal communities in order to protect the region from conventional forms of development (Baruah, 2003 p.919-920). It also aimed to keep Arunachal Pradesh's "untouched" biodiversity, landscape and the tribal identity from adulteration and exploitation. This inner line policy came to an end after the war (Joshi, 2005 p. 201-205). With the rise in political unrest in other parts of the frontier region and after the war with China, India's fear of its internal and external "enemies" made her more alert to strengthen the national security. Though the developmental path to institutionalize the frontier under the direct administration of the federal government successfully met the national security goal, it was at the cost of altering the social, political and economic structures of Arunachal Pradesh.

According to Baruah (2003, p. 917-920), the nationalization of this frontier space can be defined as "cosmetic federalism" where the new order was federal only, with little or no power of the state government to monitor or control any form of developmental activities. To further implement the practice of federalism, the central government simply broke the region into more states. India divided the larger region known as Northeast into multiple non-viable states (Ibid, p. 924-925). This disallowed Arunachal Pradesh from making any decisions autonomously. Under the new federal policy, Arunachal Pradesh was placed under a "special category" (Ibid, p. 924). With very few revenue sources, the functioning of the state was completely dependent on the central government. Ninety percent of the fund for the state's development came as a concession from the state government and ten per cent from loans. In the case of Arunachal Pradesh

developmentalism, as an ideology and as a practice, it has been quite different from the shared Indian nationalistic rhetoric like progression, economic growth, and infrastructural development. Since developmentalism of Arunachal Pradesh has been pursued as a security agenda by the federal government, the social, political and cultural isolation policy during the colonial period was still pursued. At the same time, with the region's geographical distance, the state could follow its security agenda without much concern from the public opinion of the country (Karlsson, 2011 p. 49).

By the late 1990s, India's economic growth was impacted because of the decrease in oil and petroleum production and supplies. With the collapse of USSR and the end of the Cold War, Russian oil supplies to India almost came to an end. Since India's main energy sources were coal, oil and gas, these assets added 3 to 5 million tons annually to India's oil supply. As 50% of the petroleum reserve of India is insufficient, to meet and secure domestic energy demands, harnessing hydroelectric power was the best alternative for the country to maintain its economic stability (Nandy, 2016 p. 1-6). Liberalization, and with the involvement of private players, the need to harness more power escalated. Thus, with the region opening to the rest of the world for financial freedom and industrial development, the cultural and the social identity of the region was under serious threat.

3.6 Hydromania: The proliferation of hydro-power projects on the Himalayan Frontier

According to the estimates of the Central Electricity Authority, Northeast India has the potential to generate as much as 58,971 megawatts of hydropower (Baruah, 2012), in which Arunachal Pradesh alone holds a potential of around 50,328 megawatts – the highest in the country (Das, 2013). As of 2011, 148 memoranda of understanding have been signed between

the national and state governments. The hydro-power estimate that has been mapped over the last 10 years is little less than the total hydropower capacity added in the whole country in the last sixty years of India's independence.

In May 2008, former environment minister Jairam Ramesh used the term "MoU Virus" to describe the speed by which each memorandum of understanding for hydropower projects was signed by the Arunachal Pradesh government. To build large infrastructure, it is crucial that the social and environmental impact assessments for such projects are undertaken carefully before deciding on their feasibility. But critics of the process suggest that none of these projects followed a proper protocol to get social and environmental clearance. Several fundamental problems have led to this situation. In an apparent corrupted environment, actors in power could decide on anything without being transparent. Developmental agencies and government representatives who are conducting these environmental and social impact analysis studies are known to be more "knowledgeable" and powerful within the community. It is assumed socio-politically that locals do not have the adequate knowledge to provide insights into these proposed projects. Language has also an additional barrier in these scenarios Due to the exclusionary structure of governance, some people perceive that most of the time, the reports and updates of the projects in progress are in English and are heavily jargonised (Paliwal, 2006). Compared to other countries like China, Canada, USA, Australia, where the process of EIA began early 1970s, India on the other hand is still at a preliminary stage when it comes to environmental and social impact assessments. Though, EIA in India was first started in 1977-78 with evaluation of river valley projects, it was not until that January 1994, that the Ministry of Environment & Forests (MEF) issued a Notification on EIA of Development Projects like mining, Industries, thermal power, port and harbours, atomic power, rail and road highways, bridges airport and

communications, etc. It has only been about twenty years that MEF has started the EIA process. In relation to hydropower projects, there is a set of guidelines that the country has follows, but many a times there have been issues of not abiding by the internationally documented principles. In case of developing countries like India, the word sustainable development is synonymous with conflicting trade-offs between achieving high economic growth rate and preserving the resources for a sustainable future, where, every country must ensure that efforts are made to elevate the environmental clearance procedure of which the EIA is the heart to an all inclusive participatory decision making exercise. India is struggling with the process. According to T. Rajaram and Ashutosh Das (2006) one the main hindrances of a successful environmental impact assessment process is the lack of stakeholder interactions or the unorganised role of various actors involved in the process. With the case study of the environmental clearance process of the Sethusamudram Ship Channel Project, authors have identified the loopholes in the EIA process. The main stakeholders who are involved in this process are the project proponent, the environmental consultant, the State Pollution Control Board (SPCB), the Impact Assessment Agency (IAA)/Ministry (MEF), the public/NGOs and, the National Environment Appellate Authority (NEAA). Table 1. shows how the roles of these stakeholders are distributed.

Steps in EIA	**Actors**				
	Project Proponents	**MEF**	**Consultant**	**SPCB**	**Public/NGOs**
Screening	Decides the type of project	Provide site clearance, if required	Guide the proponent in the initial screening stage	Provide site clearance	Not involved
Scoping	Provide terms of reference	Provide guidance if proponent requires any	Establish whether an EIA study is required	Not involved	Not Involved
EIA studies	Conduct EIA studies	Not involved	Conduct EIA studies	Not involved	Not involved

EIA Report (executive only)	Submit executive summary of EIA and copy of EIA report to SPCB	Not involved	Assist proponents	Arrange for public hearing	Have access to executive summary
Public Hearing	Obliged to respond to questions raised during the hearing	Not involved	Assist proponents	Hold the public hearing and forward NOC and minutes to MEF	Can provide oral/written comments regarding their concerns
Review for final decision	Submit EIA report to MEF	MEF reviews the project and accords clearance	Justify/ Clarify quarries of MEF	Not involved	Not Involved
Monitoring and clearance conditions	To adhere to the clearance conditions	To monitor progress	To assist proponents	Monitor progress	Not involved

Table 1: Summary of the roles of different actors during EIA Process (Source: Modified from MSE (2005) in Das (2006).[21]

With the major focus on economic growth and development and with immense pressure on project proponents to plan and safeguard the financial success of business ventures, the environmental consultants who are hired are expected to conduct the study with the sole objective of obtaining environmental clearance by clearing all the hurdles set up by the authorities."This involves conducting the EIA studies, clarifying all the issues during the public hearing and justifying their findings at the MEF review. The consultant in most cases does not have any insight into the prevailing socio-economic and or ecological problems of the site studied." (ibid. p. 117). In the whole process the third party consultants are the once with greatest power and responsibility. During the scoping and the screening, the Ministry has the right to provide guidance and site clearance if required. They also review the final report and monitor the progress, but they have no involvement or supervision during the EIA study, the report making phase and during public hearing. The public NGOs on the other hand, have no involvement

21 http://www.tandfonline.com/doi/pdf/10.3152/147154606781765237

during the scoping, screening, or conducting of EIA studies. They do have access to the summary of the report, provide oral or written comments during the public hearing and provide comments after the final document is published. But they have no involvement during the reviewing and monitoring phase of the final decision making process. This is why, under immense pressure from the project proponents to get clearance, and with no involvement of the third party to supervise, the consulting agency collects data of very poor quality. Most of these consulting agencies are not from the region and even if they have knowledge on how to conduct the "scientific" environmental assessment, they have little or no understanding about the place from the stand-point of social-economic knowledge.

In the case of Arunachal Pradesh, considering the topography and biodiversity of global importance, Vagholikar (2010 p.5) highlights some of the ostensible loopholes of the factual details of the social and environmental impact assessments of the developing hydropower projects. After examining the EIA reports of five major projects- Kameng, Lower Subansiri, Middle Siang, Tipaimukh, and Dibang, and consulting with natural and environmental scientists, he mentions that the reports contain innumerable incorrect data along with unverified and superfluous statement that reflects a casual approach of power companies and EIA consultants when they construct these documents. Since the authorities rarely ask for necessary additional comments, citizens' groups are increasingly reluctant to send their comments and critiques on poor EIA reports. In one of the case studies, the Lower-Subansiri project on the Assam-Arunachal Pradesh border, which is being built to generate around 3000 MW of energy, did not receive a clearance, and required rapid EIA. The Zoological Survey of India (ZSI) spent six days doing an additional study and made this statement: "...The long and vast water body thus created by the reservoir will be a happy haunt for aquatic creatures." While the introduction of exotic

species in the dam reservoirs can provide the opportunity to diversify fish stocks for new revenue sources, naturalists have argued that these sudden introductions of exotic species can also prove detrimental to the native species that in turn can impact the ecological balance of the river. The concern here is not limited to the ecological impacts. Poor reports given by renowned government institutions like the ZSI shows how casual yet manipulative this process is. Compensation, which is another mechanism by which companies get their environmental clearance granted, have been recognised as one of the appropriate tools and mechanisms to compensate the economic loss during the decision-making process. But compensation process is also quite murky because there is no proper public participation and communication in the affected region (ibid. p.3-6). "The main problem in current environmental decision-making processes is that virtually every project is treated as a *fait accompli* both by the Expert Committees appraising these projects and the regulatory authorities concerned", which in return subverts the possibility of a proper environmental decision-making says Vagholikar (Ibid. p.5)

Since public participation also happens to be one of the important components of the EIA and SIA in India, public hearings were introduced as a part of the assessment procedure to ensure participation of local people, affected communities and stakeholders in various areas of proposed developmental activities. Prior to finalising the building of large projects, submission of appropriate documents, that includes executive summary of the project, containing the salient features, both in English and local languages should be submitted. According to the law, the decision to conduct public hearings should be made thirty days prior to the hearing.

3.7 Public hearing:

"There is no use of having a public hearing if the public is not aware of the effects of the project both positive and negative. A public hearing without first informing the public is a total sham" Him Parivesh Environment Protection Society Vs State of Himachal Pradesh Judgment dated 4-5-2012 Himachal Pradesh High Court

Even though, public participation was made mandatory in 1994, the public had very little or no role to play other than appeal to the NGT and public consultation. When IAS (the Impact Assessment Division) decides to hold a hearing, it is also required to provide notice in two newspapers at least a month before the hearing (Sinclair & Diduck, 2000). Most of the time community members do not have the right information on public participation, and are also misinformed by local leaders. As explained earlier, since most people do not have secondary education, they are not very used to reading government official documents. Governmental notices that are distributed in the region are either in English or Hindi, and they always don't reach on time in remote locations like Zemithang. According to one of the villagers (part time labourer and pastoralists),

"I had no clue that there was a hearing. I was with my livestock in the grazing grounds that time. We got no information. I live in one of the households that will be impacted because of the dam, and my grazing ground is also in the downstream of the dam" (Personal interview, 2016).

Other than misinformation regarding the hearing dates, issues with the public hearing process do not end there. Critics argue, though there are specific guidelines for public participation, the whole process takes place in a very ambiguous manner. The statutory framework that provides for environmental regulation in India stipulates different kinds of

authorizations, viz., first, a pollution permit from the State Pollution Control Board certifying that the pollution impacts of the proposed project are within permissible limits; second being a general permission called environmental clearance that is mandatory for the initiation of any economic activity, stating that all other environmental laws are complied with; and third, forest clearances- authorizations that involve permissions from specific public agencies under MoEF (including the Forest Advisory Committee, Central Empowered Committee and the National Board for Wildlife) for activities that are specifically held in forest areas even if it is outside wildlife sanctuaries and national parks (Thayyil, 2016). Under the EIA notification 2006, essentially the public hearing is a process where the pollution control board conducts the public hearing. Different people can express their opinions and these should be accurately recorded by the pollution control board and forwarded to the Ministry of Environment and Forest. After this, at the state of appraisal the MoEF and its expert appraisal committee must carefully examine all the documents including the proceedings of the hearing and record how they have dealt with objections during the hearing. However, the central focus of EIA and public hearing revolves around environmental regulatory regimes only. In most parts of the world, also in India the main concern remains to balance ecological concerns about the natural environment as well as human and animal health with other variegated ideas of socio-economic development. But, this is based on developmental models that are often rooted in technological pathways of industrialization and intensive exploitation of natural resources. However, the lack of sociological and economic concerns over the impact of development has lead critics to deny the trajectory of intensive economic transformation as the appropriate pathway to human and social development. There is an increasing recognition that science alone cannot provide us with all the answers to questions regarding regulation of society and environment. Even though in such a situation, fostering

participation of general public through public hearing during EIA can resolve this problem, the information provided to the public or the prior access to relevant information and consultation that the public have are rooted in traditional scientific enquiry and has very little to do with people's local regional social concerns. For example, as mentioned above, The Land Acquisition, Rehabilitation and Resettlement Bill, 2011 was introduced in Lok Sabha on 7 September 2011. This bill aims to implement right to fair compensation and transparency to undergo land acquisition from the local people who are directly or indirectly impacted by the project. Two main discourses emerge out of development induced displacement. The first one articulates displacement as a violation of human rights (Dwievedi 2002 and Perera 2011) and the second discourse, which, following Dwivedi (2002), known as "reformist-managerial", shifts focus from displacement to resettlement. "The act of resettlement is articulated so that, if properly implemented and managed, it can be turned into a development process. The discourse is therefore action and problem-solving oriented and is fully embraced by the World Bank and by most international institutions."

The R & R policy falls under the second discourse. The National Rehabilitation and Resettlement Policy, 2007 declares that "acquisition of private property, leading to involuntary displacement of people" often has a detrimental effect on the people affected. Hence this policy tries to advocate that the people affected get their due compensations which often lie beyond monetary benefits. However, in maximum cases which involve development projects the compensation received was mostly not adequate or beneficial in real terms. For this reason, it takes a generalised approach rather than a localised approach, thus failing to take project specific action. Another important feature of this policy is that it is not always very inclusive; hence everyone who is affected is not legally entitled to compensation. The National R and R

policy 2007 states that "*Each affected family owning agricultural land in the affected area and whose entire land has been acquired or lost, may be allotted in the name of the khatedar(s)in the affected family, agricultural land or cultivable wasteland to the extent of actual land loss by the khatedar(s)in the affected family subject to a maximum of 9 hectare of irrigated land or two hectares of un-irrigated land or cultivable wasteland, if Government land is available in the resettlement area. This benefit shall also be available to the affected families who have, because of the acquisition "or loss of land, been reduced to the status of marginal farmers*." (National Rehabilitation and Resettlement Policy 2007)

But ethnographic and field based research have shown that resettlement, in conjunction with the other types of impoverishment risks- change in location, social physical and psychological detachments often implies a combination of decrease in food production and a substantial change in dietary patterns, which often lead to increase in malnutrition and general worsening of the health status of the resettled community. Displacement and resettlement can also induce an increase in morbidity and mortality because of the social and psychological stress that they cause, and the enhanced exposure to parasitic and vector-borne diseases at the relocation site, where unsafe water supply and poor sewage systems are often the norm. Uma Maheshwari, who was one of my professors at Tata Institute of Social Sciences, and one of the few independent journalists following and documenting the Polavaram Dam project since 2004, says that even if people are given financial assistance, coping with a different lifestyle in a different landscape, with different livelihood activity impacts community negatively. None of the displacement recognises the psychological stress that comes along with displacement (Maheshwari, 2007). Since the community is not given the long-term picture of the

consequences during the public hearing, they are not given the scope to rationalise these problems.

In the case of Arunachal Pradesh the R&R policy has a further complication attached to it. The assertion of 'indigenous-ness' matters- especially in situations where land rights and the legal, social and economic status of minority or ethnic groups remain controversial issues. Most of the lands in Arunachal Pradesh that were/are getting alienated in the process of land accusation are commonly owned resources[22] like forest, grazing grounds, water sources etc. and the policies and legal system in India does not protect the common property rights of the tribal people through this policy (Barbora and Fernandes ,2008). In Northeast India the trend of owning common property is related to the customary laws and land management systems. "Some traditions like those of the Angami of Nagaland and the Dimasa of Assam combined individual with community ownership while others like the Aka of Arunachal Pradesh lacked the very concept of individual ownership. Amid this diversity, common to all the tribes is the centrality of the community on which was based the customary laws that governed even individual ownership. Its owner could transfer the land only to specific persons determined by this law. Since no efforts were made towards understanding the traditional land distribution system, a system based on a written document and a land classification that is different from the communities was imposed on them under haste (Barbora and Fernandes, 2008). One issue which was identified as a potential problem in such cases was privatisation of the common property, as such commonly owned property is not included within the frame work of the R&R Policy.

[22]Common property resources are those resources which are accessible to as well as collectively owned\held\managed by a community or a group of villagers together. Such properties have no individual and exclusive property rights. However, such common properties in most cases do not have any legal "patta". A legal patta is a record in the revenue department that entitles the owner the "legal right" to use the property. However, the policies and legal system in India doesn't protect the common property rights of the tribal people. (Barbora and Fernandes, 2008).

However, Arunachal Pradesh does have any additional clause to the R and R policy as per the Memorandum of Agreement which has been decided by the state government. The special clause has been included as this is a hill state which has extremely difficult terrain. Thus, although commonly owned properties are legally recognized in this state and acquisition of such resource by the state is compensated monetarily, yet such loss of CPR still have several adverse effects. (Rehabilitation and Resettlement Policy of the state of Arunachal Pradesh, 2008). Since the government's right to acquire private land carries with it a responsibility to ensure that those affected do not suffer at the cost of a project, the changes that come along with this sort of land acquisition has not been adequately addressed by the government. For example, in the case of the Gongri Hydro Electric Project, proposed to be built by the Patel Engineering Limited (PEL), in the West Kameng District of Arunachal Pradesh, is a 90 MW project that has also acquired land in the Thembang village. The project is directly under Dirang Energy Pvt. Ltd, which is a fully owned ancillary of PEL. (MEF, 2009). This project has acquired a common land which has been shown in the court to be owned by a particular clan of the village, called Serthockpa. Hence, this particular clan has only received the monetary compensation. Moreover, the distribution of compensation money is not always equal or equitable. So certain sections of the are aggrieved and thus there is an undercurrent of jealousy and rivalry among different members of the same community. Out of the 62 households in Thembang village around 12 to 13 families belonging to the Serthockpa have received compensation. In Thembang, sudden inflow of money in communities that are not accustomed to it, is instrumental in altering the conditions existing over a significant period of time. Land of Serthockpa (sub clan TseringMerkpa) as well as the Kochilu Communities are getting affected in the Thembang village. However, only Serthockpa clan is the beneficiary when it comes to receiving compensation money and that too after a legal

tussle. The total land comes to 11.95 ha and all the land is categorized under barren land. To make the situation worse, the amount doled out to these communities, in most cases are not invested by the people. The money is spent frivolously on luxury items such as cars. This happened despite the fact that after exhausting the compensation money, they are not left with enough cash to even buy fuel. Another important finding that interested me in her research was that compensation was also caste-based. People belonging to the upper cast of a clan would invariably receive a significantly higher compensation compared to the ones hailing from a lower caste. The upper caste, *Bapu* families received compensation of about Rs 2.5 lakhs per family compared to the lower caste, *Jila* families who received only Rs 60, 000. This stark dissimilarity in compensation amount fanned the growth of animosity among the families. Money brought corruption along with it and led to enough mudslinging at rivals. Villagers of the same community accuse each other of using unlawful means to get more compensation or stop the other person from getting the same amount of money. The villagers are still engaged in a legal tussle in the court in Dirang where the *Kochilu* clan has challenged an earlier judgement that *Serchopka's* were the original owner of the land that has been acquired. This has altered the village atmosphere and there exists the undercurrent of a social conflict. We observed this tension within the village when we lived in one of the home stays in Thembang and some people would refuse to talk to us because we were associated with a particular group of people. Some village elders would grumble about the fact that the children are suddenly exposed to the outer world via television and internet. They are agitated because, the newer generation tend to stay away from agro-based occupation and they are reluctant to depend directly on natural resources. There is a gradual shift in the occupational pattern from agriculture and forestry to jobs offering daily wage. In the case of Thembang, the traces of MGNREGA jobs were seen in the form of road

construction. With contractual jobs emerging as an alternative for the locals, short-term job opportunities are their best bet. Although there is no job security in the long run, the villagers who received compensation seemed pretty optimistic about the project. The other clan members were more apprehensive about the compensation rather than safety issues.

In the Zemithang circle, the effects of such projects are different. In the Zemithang circle although land has been designated for projects like dams, roadways etc. no formal acquisition or monetary compensation has been given to the villagers yet. However, it was through her project I was introduced to the growing agitation and uncertainty among the local people surrounding the construction of the dam. When she interviewed people, I would join her for some interview sessions. The villagers of Kharmen and Kelektan were worried about the potential threat to their water sources after the construction of the dam. The Nyamjang Chu is the major river flowing through this area and damming it for power generation would invariably have a detrimental impact on the water availability for agriculture and other purposes. Although money has still not been distributed as compensation for the land acquired, yet the affected people are staring at threats from various aspects. Submergence of the grazing ground of certain villages after the dam is constructed would affect the herders who depended on cows and yaks. On the other hand, some local people are also concerned about the inflow of the people from the plains. Not only will there be construction workers and labourers to build the project but many skilled workers will settle in the region which will not only impact their cultural integrity but will affect their livelihood options as well.

According to some local people, they are hesitant to make an opinion in public spheres. Since it is a small, scarcely populated and close knit community, every one happens to know everyone (explained in details, page 78). The reason why they hesitate to talk about their

problems and to question such projects is because going against influential people in the community can have negative consequences. Due to corruption, people who have personal influences in the community, like the Anchal Samitte members, MLAs, have the power to decide government recruitment, postings, promotion and transfer. The reason why the local people are wary of their local leaders is also because they are either in a constant fear of losing their jobs, or lands, or children future. According to traditional mask maker in a village in Morshing Village of West Kameng district, "whatever happens most of the people have to go along with this corruption and agree with the local leaders. Not only because the political leaders have connections with the central government, but also have a lot of money that can mislead the local people . But if you are in their good books, you at least have a chance to get an entry-level clerical position in the government. (Personal interview, 2016).

In Arunachal Pradesh today, revenue generated from economic diversification through the exploitation of the region's hydropower potential has become the only opportunity for the state government to overcome its most pronounced barrier to gain financial independence from the central government. Since the funds are processed and implemented by the central government, only those who have the financial backing and have built close connections with the politicians of the central government, have access to these funds. During one of the conversations I had with a local elected AnchalSamiti member of the Lumla circle of Tawang district told, he told me that, "most of the local political leaders, that you see here are also A-1 or leading contractors of all the big developmental projects that is sanctioned by the central government, whether it is road, bridges, and infrastructure. Since, government officials cannot own private companies, most of these companies are owned in the names of their family members or close relatives" (Personal interview; 2016).

This apparent corruption in the region is because of the historical socio-economic and political complexity. Since, the states politicians and elites have long framed their discussion to imagine Arunachal Pradesh as a space for resource exploitation for its economic, social and political independence from the central government, going to any extent to suppress the voices with corruption and oppression seems convenient. But in these situations, the local people are constantly silenced and limited by the power structure of the hegemony. This feeling of powerlessness and inadequacy to be part of decision-making, in return makes them feel marginalised. Scholarship has argued that in a democratic environment, the margin over the time becomes a 'space of radical openness; a profound edge'(Hook, 1989). Hence, it becomes a space whereby people can stand up to their oppressors and say no to the ones in power. It can provide a place of resistance for the silenced and oppressed people. However, in case of the Monpas of Arunachal Pradesh, cultural and social obstacles act like barriers for people's willingness to raise their voices against what they perceive as power injustice. This is because the Monpas in that region are not used to democratic processes of participation, negotiation and resistance. This has perpetuated the existence of asymmetric power relations within the socio-political structure. It has placed the state government and local elites in a gainful positions to fast-track all the processes before any possible reaction from the community.

3.8 Modern and Democratic Tawang

The socio-economic and politics of Arunachal Pradesh was never democratic in the true sense of the term. The powerful hegemonic model of the traditional governance system and the vast socio-economic inequality among the people were some of the barriers and cultural obstacles that conditioned the community to a less deliberative democracy. Since selecting a

leader has always been based on a unanimous decision-making process where the "candidate" is chosen based on his or her capabilities, wisdom and power within the society, the concept and behaviour had no room for negotiation and contestation which are some of the key elements of modern democracy in India.

Electoral politics in a democracy is a new experience for Arunachal Pradesh. Due to its isolation policy, even though the first General Election in India was held in the years 1952, the voting rights for the people of Arunachal Pradesh were withheld until 1977 by a special provision of the Representation of People's Act, 1951 (Bath, 2009). It was because the administrative policies of Arunachal Pradesh had been determined to some extent by the anthropological views of Verrier Elwin, that "elections are a process that is alien to tribal culture" (Ibid, p.118). Though there were some indigenous communities in the eastern and central part of Arunachal Pradesh that had governing systems like that of a modern democracy, the traditional institutional arrangement in the West Arunachal Landscape, especially in the West Kameng and Tawang districts has been described as more "Direct but limited Democracy" (Ibid p. 117-119).

Due to the religious attachment**,** the Monpas from Zemithang valley of Tawang district still pay tax to the monastery. As mentioned above, until the last two decades, the model of governance has been about managing common property resources and the decision making process was an outcome of various pressures working on an individual level in a social milieu.

David J. Elkins has identified two strategies -- "individualistic" and "holistic" -- to explain the differences in political participation (Elkins, 1975 p.3). The individual approach aims to answer questions about an individual such as how does an individual make up his mind regarding whether to vote or who to vote for. This depends primarily on individual attributes

(such as age and attitude towards politics). The holistic approach does not rule out the importance of individual differences, but it considers them only within the context of the broader social structures, which conditions the levels of participation in the broad spectrum of citizens. In Arunachal Pradesh, people's choice or decision-making is mostly based on the holistic approach. It is largely understood, that within the indigenous society "in group" solidarity is religiously maintained. A community voter in west Arunachal Pradesh behaves politically in response to the group pressure or community welfare (Bath, 2009 p. 121-123). For example, in Zemithang, villages still conduct regular meetings called *Mangzom*. *Mang* in Monpa means village, and *zom* means gathering. The village headman or Gaonbhura calls the meeting, *Ganchen*, who is the assistant for the village headman goes to each households to brief them about the topic of the meeting and invites people to attend it. Traditionally the meetings used to revolve around village issues, regarding village welfare, village festivals, collection of taxes in the form of milk products, theft, fights, economy and overall village well being. It was a process of consent, where all villagers would gather and have an open discussion. The majority's point of view was taken into consideration and the village headman would give the final verdict. This is quite distinct from the gram sabha consent. In terms of the modern democratic system, India has a three-tier government administrative, with gram Panchayat being the lowest level of administration. However, unlike the democratic Panchayat system, the traditional village head is chosen by popular will, but only people who are respectable, knowledgably and religiously powerful, wise , or have resources are chosen. One can say their opinion in front of them; however one cannot go against their final verdict. For example, in Lumpo a village couple of years ago two young men were caught smoking, the village headman decided to ask those young boys

to leave the village as a form of punishment. Though their families were quite uncomfortable with that situation they did not go against the decision of the headman.

3.9 Nepotism

As illustrated above, politically and culturally the Monpas are used to participating in a "holistic decision making process". In a group, it is incredibly easy to be influenced and influence others when everyone lives so close together and everybody knows everyone else. Thus, the fear of speaking one's own mind becomes an integral part of their non-debatable democratic culture. Historically, speaking in community meetings was also restricted to certain people who had the religious, financial, and political power within the society. For example, in Mangzom, the final decision was made by the village headman. In a personal interview, a participant stated, "Not all of us can speak in front others. When an elderly is speaking, we must listen to them and obey them. We also never speak above the lamas (monks) here- it is forbidden" (personal interview; 2014). Thus, even after democratization, this fear of speaking out against elders, or people who in power have lingered in the region. A local once said, that "we respect political leaders and bureaucrats more because they are educated and they know more. They have seen the world, we have not! …so even if they decide on anything we have to abide by that" (personal interview; 2014).

But this scenario offers some challenges of nepotism and favouritism between close friends. Since the bureaucrats and politicians are building a close relationship with public administration, corruption is the only way to get work done at the ground level. The administration is so deeply rooted within the marginalized local society and people are so close to each other that the locality of a candidate and power within the community matters to a great

extent during election. The reason why the candidate has to hold powerful socio-economic status is because money is an important yet illusive factor in winning an election in this region (Ibid, 2009 p. 128). It is a known fact that one cannot win the elections in Arunachal Pradesh without a strong financial background. Though voters don't admit receiving payments for votes, in most cases votes go to the higher bidder. This also gives the people in power an upper hand to control the process of governance.

Looking back at the history and seeing how the process of nationalization of frontier space through "cosmetic federalism" has taken place, it shows that the community has been oppressed and marginalized not only socially but also politically and economically. Mean while, the rush for harnessing hydropower has further increased socio-cultural and economic inequality in the region. As mentioned earlier, marginalization has been influencing the conditions for democracy, in return has threatened to alter the power structure of the region. To understand this shift from the inability to resist to a rise in resistance was possible when traditional institution joined the modern democratic politics in the recent years.

In a small community with such strong religious connections, money does not always play a deciding factor in some of the constituency of Arunachal Pradesh. As mentioned earlier, for the Monpas, religion is a major component of their identity. Despite the political, social and environmental changes, and the banning of monastic taxation system; the community continued their traditional ritualistic livelihood practice to provide taxes to the Tawang monastery. This strong connection of the Monpas with the Monastery is unique to Zemithang valley. With the increasing involvement of religious leaders, traditional institutions and with the politics of development, people developed the courage and curiosity to question their identity, subjectivity and positioning in the society. According to Hook (1989 p. 153), in contested spaces, community

develops their own subjectivity and identity and categorise the world, according to themselves. To facilitate a resistance movement, it is necessary to find that niche. In Hook's view margin therefore becomes a place of strategic importance. Democracy in Tawang district evoked outside of state sanctioned event. It happened when a group of monks and representatives from religious institutions took it upon themselves to have their voices heard through resistance. With a lot of support from the local people of Tawang district, the region revived to restructure the power.

Fig 6: Abort, Circle Officer, Local MLA as special guests in Gorsam Festival

It was till recent years that religion found a place in the electoral politics of Arunachal Pradesh. Late T.G Rinpoche was one of the first young monks and was a prominent example of non-governmental advocate that flourished significantly in a not so well defined democratic society. In Tawang and West Kameng district many Buddhist monks are well educated in western education and very articulate. A monk in Zemithang Valley once said, "T.G Rinpoche, is like our guide. He not only provides us religious guidance, but he helps us understand the ongoing changes. He knows how to give Dharma a concrete shape" (personal interview; 2016).

Since he had the support of the local people, he played a strong role in alternative politics and offered a safe platform that provided an opportunity for the people to gather and advocate talking about the change. Though he did not serve as an MLA, he was the former Minister of the State- holding the position of Chairman, Department of Karmik&Adhyatmik (Chos-rig) Affairs (DoKA), govt. of Arunachal Pradesh (Claude, 2017). According to many locals he was a great leader that wanted wellbeing of the environment, socio-cultural aspects of the community, as well as encouraged sustainable infrastructural development in the region. In May 2014, after his unfortunate demise in Delhi, where he had allegedly committed suicide, it was suspected that his cause of depression was due to the massive corrupted pressure from the state and development agencies and the result of defeat of a cousin in the 2014 Arunachal Pradesh Assembly election. A participant spoke passionately on this incident.

"The death of Rinpoche was very sad, and shook our ground. He was the only one whose voice was heard, and who represented our concerns" (Personal Interview, 2016).

3.10 The Rise in Resistance

On 2 May 2016, on a busy Monday morning in the heart of the Tawang Township within the eponymous district, two men were killed and six others injured by shots fired by police. The incident was the result of a peaceful demonstration by civilians, monks, and local non-governmental organizations (NGOs) that had turned hostile and attempted to enter the police station, following the court's rejection of the bail plea of an arrested anti-dam movement leader, Lama Lobsang Gyatso (Kashyap , 2017). Lama Gyatso, a Buddhist monk of the Tawang Monastery[23] and the head of the Save Mon Region Federation (SMRF), was arrested almost a

[23]Tawang Monastery- It is the largest monastery in India and second largest in the world. The Monastery belongs to the Gelug school of Mahayana Buddhism.

week before the incident after a police complaint which alleged that he had defamed the Tawang Monastery's Guru Tulku*Rimpoche (*Abbot), the spiritual head of the Mon region, by questioning his nationality and integrity, and insinuating his support of mega dam projects. This was a significant event as it marked a turning point within the state's social, environmental and political setting. Long known as a remote, peaceful place the Tawang region in western Arunachal Pradesh, turned overnight into a place of social risks, environmental vulnerability and political crisis.

The Save Mon Region Federation is an organization founded in August 2011, during the time the dam was proposed. Though the organization did not have much local, regional or even national recognition back then, its main aim was for the government to acknowledge the importance of local people and the potential impact of the dam on local livelihoods and how to involve people to keep them informed about every aspect of the decision-making process. However, with time and when decisions started to be made under haste by excluding people, the organization began to gain momentum.In this scenario, certain external actors like NGOs, activist, social organizations played a prominent role in nongovernmental advocacy. The lack of appropriate consultation process and EIA process encouraged bodies to legitimise the recognition of these faults. Since many of these organizations, share analogous objectives as of the local people, they act like a support system to be part of this movement. Historically, the culture of NGOs and grassroots level organizations was not that popular in the region. But in the last couple of years, every village has formed a local organization that has come together to bring about changes in the region. Talking to one of the youth leaders of an NGO, he said "we have a group of vibrant youths who will bring development and change to this village, if we go together to the government they will listen to our demands" (Personal interview, 2016).

Over the years, central and state governments have also provided schemes, grants and incentives for youth to form these kinds of organizations.[24]According to one of the locals, many people are forming local organizations for the sake of funds. But the lack of an appropriate consultation processes, transparency in decision-making and inequitable access to resources has dominated their campaigns. Save Mon Region Federation being one of the grass root level organization comprising of monks, and civilians, played a strong role as an opposition against the building of the dams. According to them these projects threaten the very existence of people, their culture and the environment. The organization is very well informed, and has a strong support and resource base to gather information and knowledge to stand up against the power structure. Media, international organizations, independent journalists, and academics have been some of the sources on which they depend on for information and knowledge. Acts like National Green Tribunal, also helped in catalyzing the rejuvenation of disposed projects that have environmental concerns. In the appeal filed by Save Mon Region Federation before the National Green Tribunal, (Srivastava & Ramchandra, 2016 p. 51-60) challenging the environmental clearance granted to the project proponent of the Nyamjang Chhu HEP- one of the grounds of inappropriate and faulty study by EAC- was a major step taken by this grass root organization. The Tribunal noted that the errors and faults at the scoping stage by the EAC and halted the project in demand for another fresh study.

Despite all the resistance, agitation surrounding the social, political, economic and environmental marginalization, the primary reason why the dam was legally halted was because the dam was proposed to be built on the site which is one of the last remaining wintering habitats for a vulnerable bird species - the black-necked crane (Grus nigricollis).

[24]http://arunachal-pradesh.ngosindia.com/

"Learned Counsel appearing on behalf of the Appellants further pointed out, from negative answers to the queries at serial Nos. 1,2, 3 regarding III Environmental sensitivity in Form I- Whether the area is protected under international conventions, or is important or sensitive for ecological reasons, or used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting or wintering migration, the insensitiveness of the PP when it is a wintering site for endangered vulnerable and threatened to species of birds-Black necked Crane and (Grus Nigricollis) and wintering site for this endangeredspecies. He submitted that the project in question is located at the very much identified wintering site of the Black necked Crane- ZemithangNylah, an important Schedule I (J) Appeal No.39 of 2012 19of 26 Bird area. He submits that the Black necked Crane is the Schedule-I species under the Wild Life (Protection) Act, 1972 (Entry-1(a), part-III Birds). To answer the counter contention that there was no scientifically validated and legally recognized material to support existence and sighting of this endangered species at Zemithang, he invited our attention to the Scientific Report and studies "Critics of Wildlife Sections of the EIA Report" published by the Senior Scientist of the Nature Conservation Foundation – Annexure A-29. The Relevant text of the Critique reads as under: "In addition, the NyamjangChhu River valley is one of the few wintering sites in the world visitedby the Black-necked crane (about 7 birds) listedas vulnerable by IUCN and Bird Life International (2001). The valley suitable for the Black-necked crane is from Broken thang (27043'38.47"N, 910 43'39.69" E), a 3km stretch at an average altitude of 2000msl (Dutta 2010, Rahmani 2010). The average width of the valley is 030 and water flow in this stretch of the river is gentle with small seasonal islands and grasslands on both sides. Locals who call the bird 'Thung-ThungKarmo' revere the bird and report that the cranes have visited the valley since time immemorial. This crucial wintering area overlaps with the project site." (NGT, 2016).

This species of crane, not only was ecologically important, but also had a great religious significance to the Monpas. The Monpas believe it to be an incarnation of the sixth Dalai Lama, and therefore consider it sacred (Ibid. 2016 p.54). The symbolic power of certain species and the historical impact of wildlife conservation brought a new wave of human-environment relations in Zemithang Valley in the present discourse of development. The opposition against dams draw attention to several issues. On one hand there is a matter of technical particularity, lack of consent, loopholes within the EIA process, and on the other hand it is a matter of marginalization, ethnic sovereignty, protection of livelihood etc. From these, we all can agree that Arunachal Pradesh's path towards development has been quite tricky, and in Karsson's words a kind of a "resource curse". But the history of India wildlife conservation and its institutional impact on developmental activities shifted the path for local people and their concerns. Thus in the next chapter I will explain the historical significance of wildlife conservation in India and how the various stakeholders negotiated and the community embraced it to resist against big dams

Chapter 4

Colonial and Post-Colonial Conservation Practices in India

Practice and application and science. Gathering data for science. Conservation in the end to the means science. They are doing, management s and conservation and conservation and protection. There are many Conservation Biology by Curt Meine. (Conservation biology for all).

'That (Project Tiger) is what that has kept the tigers alive…..had it not been for project tiger, the tiger would have been the first large mammal on earth to have been disappeared, that is the achievement of Project Tiger!' – Bittu Sahgal, Sanctuary Asia

'Also, comparatively tiger habitat may have shrunk, a majority of our tigers densely fill an area of 30,000 sqkm'- Dr. Jhala, Tiger Biologist, Wildlife Institute of India

'Massive developmental activities include the overuse of forests outside reserves and the perpetual demand for infrastructure impacts habitat of large carnivores. Project Tiger agrees that the biggest challenge is the need to strike a balance between conservation and infrastructure development in the context of tiger reserves and its corridors"- Dr. Gopal

As mentioned earlier, Arunachal Pradesh has long been imagined as unique in relation to the rest of India: it has been considered untouched wilderness that is remote, pristine and fragile, where communities live in harmony with their surrounding nature and practice sustainable forms of traditional livelihood (Dhar, 2001). One of the reasons for such a simplistic representation of

the place is because Northeast India is known for its rich biodiversity, multiple ethnic groups, diverse culture, and large untouched forest cover. The watersheds of the region are not only critical because the nation and the state have both recognised it as the largest resource base for the production of energy to meet the country's surging hydropower demand, but also its catchments regulate hydrological flow to some of the world's most densely populated agricultural lands and cities. However, in recent decades, resource depletion and watershed deterioration has captured the attention of many national and international organizations and working groups concerned with how to "protect" the forests and its people from such rapid change. Macro institutions like the World Bank have expressed their concern regarding strategies to address the issue of biodiversity loss. This is because, unlike other parts of India, which have strict forest and wildlife protection laws, Arunachal Pradesh or the larger region known as Northeast India has a different governing system. This is due to the socio-cultural and the environmental "uniqueness" of the region and its long colonial history which has resulted in the formulation of special policies that allow customary systems of forest management that complements traditional systems of governance. These policies reflect colonial perceptions, as the British colonial government understood that the hill communities could not be centrally administered and were best allowed to function under their own governance systems. Following this legacy, right after independence the Indian constitution standardised special rights for most indigenous hill communities under the sixth amendments of the constitution. However, with the increase in central administrative, economic, political and military involvement in the Northeastern part of the country, and with the rise in local agitation and demands from local people for greater participation in decision making, the government has tried to implement "holistic" environmental policies to meet the needs of the nation. By increasing dialogue,

involving various local working groups and by trying to integrate the traditional environmental knowledge of various communities along with scientific knowledge, they have attempted to achieve sustainable development. However, academic research has highlighted the limitations of these policies: "the lack of understanding is… visible in national policies and programmes because it ignores history and present circumstances" (Poffenberger, 2006).

To understand the present status and practice of conservation in Arunachal Pradesh, I will begin this chapter by briefly describing the history of India's wildlife conservation strategies during the colonial and post-colonial periods. I discuss how the binary rationale of 'nature' vs 'society' has authorised certain stakeholders to advocate and defend conservation of nature in isolation. Braun (2008, p.2) and Cronon (1996) argue that the extreme metaphors attributed to a region and its people are not benign "rhetorical flourishes", rather they shape the way people respond to them. This idea lies at the heart of the binary logic of representing 'nature' in a Euro-centric way: nature is either pristine, or disrupted by human activity. This logic has influenced the vision of "nature" as something to be conserved and protected from human disturbance, which is a reflection of the cultural, political and social construction that started influencing conservation policies in India during the colonial period.

Since the people of this part of India have been dwelling in a biodiversity-rich area for a very long time , these specific purposes of managing lands following certain scientific and objective- based criteria have marginalised indigenous communities. Ashmita Kabra (2009) has worked extensively with communities residing near protected areas in India and her research focuses mainly on how conservation of wildlife has marginalised forest dwelling communities. According to her long-term ethnographic research, there are various risks that arise from conservation-induced displacement in various degrees. The most important one is the impact it

has on the livelihood of the people and gives social and psychological stress on the community (Terminski, 2013). Although this is an unsophisticated and simplistic deduction, suggesting that colonialism is not the only factor that has re-shaped the socio-cultural structure, in this chapter I have highlighted evidences which show that colonial ideologies of establishing protected areas have played an influential role in shaping the present conservation attitude of the country. With the increase in troubled relationships between the state and rural groups along with a rise in agitation from the margins, scholarly works began to consider these colonial conservation practices and their effects from a critical lens. In the last two decades, influential works by a number of scholars, (e.g. Berkes 2012; Gadgil, Berkes and Folke 1993, 11-156; Ostrom 1990) on the importance of traditional knowledge in community-based resource management have highlighted and argued for the growing need for government, industrial corporations, scientists, indigenous communities and NGOs to attain social egalitarianism and environmental sustainability for the state. Thus, strategies to bring 'holistic' interdisciplinary solutions among networks of stakeholders to contour plans and policies for conservation of biodiversity without hindering economic growth and industrial development has become the main goal of the state. Thus, in the second part of this chapter I elaborate on the present "holistic" conservation initiatives in Arunachal Pradesh that have been adopted by areas that are of both environmental and social importance. However, even though scholars, government institutions and agencies, and working groups over the last two decades have tried to incorporate indigenous knowledge or traditional ecological knowledge[25] as a crucial component in wildlife conservation and resource management in this region, there has been little or no improvement in the integration process. This is because there is an increase in the exploitation of natural resources, which is not only

[25] Traditional Ecological Knowledge- Indigenous communities that are residing in biodiversity rich areas uses traditional ecological knowledge (TEK) to manage their surrounding resources, in a holistic manner,

affecting biodiversity, but also the communities. Due to the complex socio-political and environmental history of Northeast India and the apparent legal loopholes in government policies and plans, I describe how the reshaping of this Euro-centric conservation practice into a "holistic" conservation practice, which is understood as a 'scientific' solution to larger societal problems, is not an outcome of 'pure' scientific knowledge and is not quite on the right trajectory. This is because the colonial idea of nature existing outside a social realm and as something that only provides ecosystem services still resonates within the conservation practice in Arunachal Pradesh. This simplistic understanding has transformed the complex human-environmental relationship in India and has hindered communities functioning as a meaningful whole; and in the process, has led to the abuse and misuse of these knowledge systems.

4.1 The History of India's Conservation Practice:

> **"***It becomes a question how far it would not be well to employ in each region where necessity exists a certain number of paid tiger-killers or snake destroyers.... If the extermination of creatures which prey upon herbivores were taken up as systematically in India as the extermination of creatures which prey on game in England, there is no reason why satisfactory results should not soon be obtained."* **(**Rangarajan, 2001)

In India, today, wiping out extensive stretches of forest cover to build large industries or hydropower projects is not an easy task. The growth of the middle class conversation lobby has politically and socially changed the discourse of wildlife conversation practice, which in return has successfully re-contoured the current landscape of the country. As mentioned earlier, there

are two apparent waves of wildlife conservation practices that have shaped the present human-environment structure at both local and national levels.

The first is the practice of the exclusionary model of wildlife conservation. This started to develop during the colonial period and boomed during the 1970s to 1990s. Based on the earliest ideas of the construction of "wilderness", this Euro-centric concept portrayed nature as a dangerous, ungodly place that needs to be controlled (Cronon 1995). Merchant (2003, P. 2) argues that the story of the Garden of Eden is one of the first stories about the relationship between humans and the environment, which has shaped Western culture. Having defied God and eaten from the tree of knowledge, Adam and Eve are banished from the Garden of Eden - a paradise where all their needs are met. Adam and his descendants would have to work for food and survival in the unforgiving desert (Barry 1999, P. 37). This contrast between Eden, which was safe and predictable, and the wilderness, which was dangerous and unpredictable, contributed to this negative perception of the "wilderness" and was also a motivation to conquer the wild. Thus, in the Bible, this narrative is the story of upward progression in which humans have an ability to gain power over nature and to manage and control the earth in search of the lost garden (Merchant 2003, 11).

Often, "environmental protection" and "environmental conservation" are phrases that are used alternatively, however both have quite different roots. Parks themselves are outcomes of specific moments in human history (Rangarajan, 2007 p. 6). Large mammals often became the conservation focus of newly independent nation states: the survival of the European bison in the wild in Poland in the 1920s seemed as vital to the country's rulers as the giant sable antelope to post-colonial Angola (Schama & Porter 1995). India has been no exception to this trend.

Mahesh Rangarajan, known to be one of the most celebrated environmental historians, has written extensively on India's wildlife history. His first book, *India's Wildlife History*, lucidly illustrated two thousand years of the complex environmental history of the Indian subcontinent. Rangarajan's main aim was to describe the transformation of Indian wildlife under British rule. In one of his chapter's "Venomous snakes and dangerous beasts", Rangarajan argues convincingly that under the central administration of British rule, the war against errant species began. Bounties were given out in various provinces to eliminate 'dangerous beasts and poisonous snakes'. The village-based *shikaris*, often known as low caste hunters, became the lynchpin of the government's effort to impose its own vision of nature on south Asia's jungles (Rangarajan, 2005 p.23). The British, for the first time, came along to teach the people how to *tame* these dangerous beasts. Within two decades of defeating the rulers of Bengal in the historic Battle of Palashi in 1757, colonial India was giving special rewards for killing large mammals like tigers, elephants, wild buffalo and the Indian one-horned rhinoceros.

Because these animals were so valuable to some people, almost like trophy-worthy animals, hunting fierce and dangerous large mammals like tigers started to be represented as an attractive target (Saberwal & Rangarajan, 2003 p. 35). However, by the mid-1920s, this attitude of exterminating large mammals began to change. G. Bower wrote that "for the sake of rarity alone, it seems desirable to protect them'. In some parts of the country, tiger exterminators began to hesitate before a kill due to the increase in "rarity" of the majestic species (Rangarajan, 2005). However, there were other mega fauna like Asian cheetahs, lions, one-horned rhinos and wolves that were not pre-conditioned to be protected as they were not constructed and recognised as a trophy animal like the tiger. One can argue that "rarity" was not the only factor that played a role in starting the 'conservation' attitude among the people. In fact, though bounty killing declined,

the attitude towards protecting habitats to save large mammals was far beyond one's imagination at that time, because hunting was still a prominent outdoor sport among the elites of the country. Thus, the decision regarding what kind of animals were worth protecting and what kind of animals were not was heavily influenced by the royal hunting practices of the princely state at the time.

4.2 From Game Parks to National Parks

Having submitted to the British as paramount power of the land, Indian princes had their designated lands to hunt. With the increase in scarcity of the majestic iconic animals in the British-ruled territories, officials, from the viceroy to the district officer viewed the rich forest covers as a man's sports paradise (Ibid, p.36). Protection of these areas was necessary not for the sake of its own protection, but to meet the desires of the royal family, the colonial officials and to secure good trophies to practice their exclusive hunting sport.

By the nineteenth century, from being a sport, hunting had evolved into an elaborate ritual, combining elements of princely tradition with British habits. At the same time, along with the development of the tea industry, and the expansion of railway tracks and roads to connect several tea estates, a process of urbanization began which transformed the large forest covers into a timber harvesting resource base (Guha, 1990). Vast networks of railway lines and new underground collieries generated a huge demand for wood. The exploitation of forests was an absolute necessity for the British government to expand the economy. In 1878, the Indian Forest Act[26] was passed. It was the first act that enabled state protection of about one fifth of the country's land. However, the prime motive of the act to protect these forests had little to do with the protection of flora and fauna and had much more to do with the changing significance of

[26]http://bombayhighcourt.nic.in/libweb/oldlegislation/1878.07.pdf

forest wealth in the empire's scheme of things. Though the creation of the Imperial Forest Department in 1864, aimed to control traders and other private users such as forest-dependant tribals, the forest rules in many states regulated human activities, along with "nature" itself. Since the act specified that all the feathers, tusks, bones and skins of animals from the reserve forests would be strictly government's property, hunting practices had lead to the development of a good market for animal trading (Rangarajan, 2003). It is very apparent that under the conditions of colonialism, the development of protecting "wilderness" was nothing but a form of property management (Ibid, p. 52). However, with the spatial rise in human activities began the transformation of the landscape: simultaneously wiping out forest covers, habitats and large mammals, leading to an increased human-animal conflict. With the decline of wild prey and animal habitats, there was an increase in human-animal conflict.

Corbett, who was a British colonel during this period, played an influential role in introducing the "conservation of wildlife" attitude among the people of the country. Though he was an eminent hunter during the period of British rule, Corbett started to photograph what were seen as majestic species with his camera in the 1920s (Ibid, p.70). With time, the focus started to shift from hunting man-eating tigers to photographing them and studying their behaviour. Under these influences, the government created India's first national park in 1935. The park itself was carved out of a reserve forest for shooting, but there were no human habitations within the park as the people had all been removed in the late nineteenth century. The main aim was to increase the number of tigers in the park. It was for the first time that the concern for nature grew out of the ethos of the hunt. It became an offense to kill or capture 'any mammal, reptile or bird' or even to disturb them within the 18 km.square mile park.

During the British period, “nature” was a project for nationalist or imperial aspirants. Terms like “protected areas” and “reserve forests” were nothing but an outcome of resource management because of its utilitarian values. However, the changing ideologies of people that made them protectors instead of hunters brought a new wave of environmentalist attitudes within independent India. Protection became a vital task for federal and state governments (Shahabuddin et.al 2007). The role played by Indians in the post-colonial period led to the promotion of new conservation policies. During the time of Nehru, prominent naturalists like M. Krishnan anticipated that the country’s conservation agenda could only be met if habitats, flora and fauna were scientifically conserved. A few scientists and naturalists started to anticipate that rapid developmental activities and the intervention of human activities would substantially impact the habitats of species. Despite many limitations, they did lay a solid ground for future initiatives. Under the governance of Prime Minister Indira Gandhi, India saw a new era of conservation that culminated in an internationally renowned programme- Project Tiger (Rangarajan, 2003).

4.3 Impacts of Authoritarian Conservation

With such a rich history, it was apparent that tigers would become the focus of most discussions. The concern to protect the big cats gained credibility when leading scientific studies started to predict the ecological collapse with their graphical evidences (Scott, 1959, Scaller, 1969). As a young wildlife enthusiast and member of the parliament, Indira Gandhi along with various wildlife scientists drafted the first federal law, the Wildlife (Protection Act) (1972). What made this initiative more prominent was, international organizations like WWF supporting the tiger protection project with financial contributions of over a million dollars. Preservation of wildlife was brought to the concurrent list of the Indian constitution, which brought the states to

a non-negotiable position. The tiger became the flagship for major advances. With the beginning of Project Tiger in 1973, India saw a shift politically, socially and environmentally. With the launching of mandatory federal laws, the number of protected areas doubled across the country. Every national park and Tiger reserve had a buffer region, preserving land beyond tigers (Rangarajan, 2003 p.101). The idea of recognising key species resonated in other parts of the country and every region started to be known for their key-note species. For example, the rhino became the symbol of Assamese regional nationalism in the Brahmaputra valley (Hazarika & Saikia 2005), the Asian Lion of Gir became the symbol for Gujarat, etc. Marginalization of villagers was nothing new having been around since the pre-colonial period. However, with the region known mainly for its' animals, but less for its' people, authoritarian conservation increasingly came under attack because the nation's idea of citizenship and rights started to spread. Alienation of local people became a growing issue because villagers had no access to NTFPs and were not allowed to graze their cattle. The conflict between authority (forest department) and local communities escalated almost near every protected area. A few alternatives were tried out like rehabilitation, compensation or alternative livelihood options, but most of them failed to meet the needs of these local people thereby giving rise to the second wave of conservation in the country.

4.4 Small is Beautiful

In light of local dissatisfaction with the current approach of separating humans from "nature", this exclusionary model of wildlife conservation had manifested into a lot of dissatisfaction among people in resource rich areas. Social scientists like Asmita Kabra and Singh & Sharma (2004), Ramchandra Guha (2000), Mahesh Rangarajan (2003), and many others

have written extensively on the exclusionary model of conservation practices in India and its impact on people residing near protected areas. The main aim of all these ethnographic works was to portray that indigenous people who have been residing in harmony with nature are the original ecologists. They are the wise and responsible users of natural resources. It was quite apparent that the dualities of nature and society represent simplification of a complex phenomenon: Exclusionary conservation is simply too rigid and too simplistic to deal with, keeping in mind the diversity of situations in India. Moreover, with such a long history, India's wildlife protection law is quite stringent. However, even with so many critiques of the exclusionary conservations model, India as a country has not quite achieved the "holistic" wildlife conservation law where engaging community is a mandate to any form of initiation or decision making. When several external actors like a researcher, conservation-based working groups, individuals or tourists work in protected landscapes, consultation with the local indigenous societies is not mandatory. This is because the forest department, not the community, plays the nodal role in forest management. In India recorded forests are still classified into reserves, protected and un-classed forests and some of the acts are very powerful bringing about significant changes in forest management and wildlife protection in India. The Wildlife (Protection) Act, 1972 (Last amended in 2006) is a powerful legal framework that prohibits hunting, mandates the protection and management of wildlife habitats, establishes protected areas, regulates and control trade in parts and products derived from wildlife, identifies and categories various protected areas like National Parks, Wildlife Sanctuaries, Tiger Reserves, Conservation Reserves, Community Reserves (The Wildlife Protection Act, 1972). The Forest Conservation Act (1980**)**, checks rapid deforestation caused by forestlands that have been released by state governments for agriculture, industry and other development projects (allowed

under the Indian Forest Act) the federal government enacted the Forest Conservation Act in 1980 with an amendment in 1988. The Act has made the prior approval of the federal government necessary for de-reservation of reserved forests, logging and for use of forestland for non-forest purposes etc. It is quite apparent that since independence, the government of India has made some attempts to integrate set of national environmental and developmental policies, especially relating to administration of public forestlands. However, unlike much of the Indian sub-continent, where forest department have been functioning as state forest managers for over a century, in Northeast India most state forest departments including that of Arunachal Pradesh came into force after the 1970s (Proffenberger, 2006 p. x). This is because, for parts of Northeastern India, the British rulers preferred to follow the policy of non-interference in administrative matters (Proffenberger et.al, 2007). Thus, management of natural resources remained with the community to be governed by the traditional customary laws for a long period.

4.5 Legal aspects of Conservation and Land Rights in Arunachal Pradesh

Following Independence, and with the adoption of the Constitution of India in 1950, the ownership rights over land and resources were further protected by special Constitutional Provisions (Indian Constitution Sixth Schedule for Assam, Meghalaya, Mizoram and Tripura; Article 371 H for Arunachal Pradesh, Article 371 C for Manipur and Article 371 A for Nagaland, including the Fifth Schedule) (Barik, *et al*., 2007). As a result, in most of the Northeastern states substantial forest areas were now under the 'Unclassed Category' which were *de-facto* under the traditional control of local communities. This was not only because of Verrier Elwin's (1965)

influential views on the ways in which independent India should govern the Northeast- "democracy or modern ways of governance are a process that is alien to tribal culture" but James Scott in his book *The Art of Not Being Governed: an anarchist history of upland South East Asia* talks about this uniqueness of hill states. According to Scott, the region has a long and complex pre colonial, colonial and post-colonial history that insulated it from colonial methods of governance. He argues that unlike lowland India, which is mostly divided by caste, class, tribal and non-tribal societies, Northeast India is home to diverse indigenous people, having their own distinct cultures, forms of social organization, history and languages. Also, the region is rich in biodiversity, natural resources and various communities have different forms of economies, ranging from hunting, grazing livestock, shifting agriculture, settled agriculture, timber production, small scale businesses, daily wage labours, commercial cropping, to horticulture. This suggests that most of the indigenous communities are heavily dependent on forest resources (Scott, 2009). Though the political region of Northeast India presently comprises seven states, this nomenclature is relatively new. Earlier this region was known as Assam and consisted of almost all the states of present day Northwest India except the monarchical kingdoms of Manipur and Tripura. By the treaty of Yandaboo signed between the British government and the Burmese in 1826, Assam was annexed to British India and the hill districts were formed by independent tribal units and existed on the fringes of the territory. Consequently, with the coming of the British officials and tea planters to the foothills of the Eastern Himalayas, the region was socially and economically exposed to the rest of the world. Though indigenous tea plantation was discovered in various parts of Assam by the early nineteenth century, British authoritarian expansion had not reached the hill states just yet. Scott says that because of the distinct socio-political and geographical characteristics of upland south-east Asia, the region was separated

from mainland South East Asia. Upland South-East Asia that mainly comprised Burma (today known as Myanmar), North East Frontier Agency[27] (present-day Arunachal Pradesh), Assam, Nagaland, Manipur, Tripura were not only geographically and topographically different from rest of South Asia, but the distinctive features of the hill societies- their agricultural practices like slash and burn agriculture, religion, social and political organization, kinship virtually every aspect of life became a mechanism for people to "escape" from the colonial and the post colonial authoritarian power of the lowland. Scott mentions, that the image of the upland hill society of being 'rude', 'primitive' can be explained as 'barbarism by design' and helped the region to be left out from the low land authoritarian influences and function with a lot of autonomy (Scott, 2009 p. 8). However, since most these communities were in constant interaction between the plains and the hills through business, trade, the plains also appealed to many people.

As mentioned in chapter 3, with the reconfiguration of the Northeast states even the forest policies started to change. Efforts of the government of India to establish a network of protected areas in the Northeast to conserve biodiversity were made. Keibul Lamjao National Park in the state of Manipur was first designated sanctuary in 1966 and then was designated national park in 1977. Namdapha in east Arunachal Pradesh was a designated Tiger Reserve and a National Park in the year 1983. Other than few more protected areas, the extensity of transforming 'unclassified' areas into protected areas was quite limited because of the failure to involve indigenous communities and local people (Poffenberger, 2006). According to the World Bank report, the major constraint to these initiatives has been failure to these initiatives is the failure to interface effectively with local communities that are engaged in forest protection and management. Since the colonial and early post-colonial history had influenced people to develop

[27] NEFA: The North East Frontier Agency (NEFA) (formerly the North-East Frontier Tracts) was one of the political divisions in British India and later the Republic of India until 1972, when it became the Union Territory of Arunachal Pradesh. Its administrative headquarters was Shilong (until 1974, when it was transfereed to Itanagar).

their own sense of autonomy in governing their resources, despite the biological significance of Northeast India, the "top-down" approach to designate areas as national parks had fallen short of its goal.

According to the Conservation Atlas of Tropical Forests: Asia and the Pacific, *"Northeast India is one of the most crucial areas in sub-continent for attempts to develop a comprehensive conservation network due to its rich diversity of habitatsm and significant level of endemism that are found in wide variety of flora and fauna… yet, by 1989 only one percent of area had been designated as protected area (total 1880km 2)…… yet external pressure from logging and mining activities, and internal pressure of farmland is driving a process of forest degradation that threatens the rich and unique biodiversity of the region".* Unlike other regions of the country, administrative control of forests in Northeast India is predominantly owned and governed by the community with much of the forest listed as "unclassified". Below (see table 2).

State	Total	Reserved	Protected	Unclassified	Total	Shifting Cultivation (1987-97)
Tripura	0.63	0.36	0.05	0.22	0.63	0.06
Sikkim	0.26	0.22	0.03	0.01	0.26	*
Nagaland	0.86	0.01	0.05	0.80	0.86	0.39
Mizoram	1.59	0.71	0.36	0.52	1.59	0.38
Meghalaya	0.95	0.10	0.01	0.85	0.96	0.18
Manipur	1.50	0.14	0.40	0.96	1.50	0.36
Assam	3.07	1.81	0.40	0.86	3.07	0.13
Arunachal Pradesh	5.15	1.53	3.61	0.01	5.15	0.23
Total	14.01	4.88	4.91	4.23	14.02	1.73

Table 2: Classification of forests in Northeast India States (Source Poffenberger, 2006)[28]

28 http://siteresources.worldbank.org/INTSAREGTOPWATRES/Resources/Background_Paper_12.pdf

For example, in the case of Arunachal Pradesh, the area of forests under the categories of reserved forests, protected areas (wildlife sanctuaries and national parks) and village forest reserves is about 37.32 per cent of the total forest cover in the state. The recorded forest cover is 61.5 per cent of the total geographical area of the state covering approximately 51,540 sq.km (Ibit, 2006 p. 18). Since there is no land revenue regulation in the state, the legal status of forests outside reserved forests, Wildlife Sanctuaries and National Parks, is not well defined. Approximately 60% of the designated land is under unclassed forest that reflects it is under community control. The concept of community owned land in this context is also quite interesting.

In the year 2006, Government of India declared the Forest Rights Act, otherwise known as the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. The act was implemented to recognize forest rights of forest dwellers in different parts of the country. It recognised tenure rights and security on 'forest' lands, livelihood rights, such as agriculture, pastoralism, non-timber forest produce, and so on, including rights to collect, trade and process the latter, traditional, customary and developmental rights and governance rights to protect, conserve, regulate and manage community forest resources. According to a recent study, at least 40 million ha of forest lands are eligible for recognition as community forest Resource Rights (CFR) rights (Rights and Resource Initiatives et.al, 2005). This figure includes 32.198 million ha located within village boundaries as reported by the Forest Survey of India 1999 and at least another eight million ha in Northeastern States (Bijoy, nd). The figure does not include rights over forest areas outside revenue village boundaries customarily used by forest-dwelling communities. The study points out, "barely 1.2 percent of this area has actually been recorded and recognized" (Bijoy, nd p.2). As shown before, as per the constitution since

different states have different administrative bindings with the central government even the FRA application is different. Unlike in states like Assam, Meghalaya, Mizoram and Tripura, which have the Sixth Schedule (a variant of the federal structure that aims to provide partial autonomy to certain regions of country), they do not bar the application of FRA in these states and areas. However, States like Arunachal Pradesh that is under the constitutional provisions of Article 371 H the FRA is applicable to these States. (Ibid. p. 4)

The Gram Sabha is the central authority under FRA. The States of Arunachal Pradesh, Jammu & Kashmir, Himachal Pradesh including its Fifth Schedule Area, Sikkim, Uttarakhand, the valley of Manipur, and the non-Sixth Schedule Areas of Assam and Tripura follow the Panchayat Raj system. The Gram Sabha is part of the governance structure under Panchayat Raj. However, the Gram Sabha that is empowered under FRA is not the same Gram Sabha of the entire Panchayat (i.e. the assembly of all voters in a Gram Panchayat). Such Gram Sabhas are unsuited, unwieldy and not permitted under FRA (Ibid. p. 5-6). However, in the Sixth Schedule Areas of Assam, Mizoram, Meghalaya, Tripurathe hills of Manipur, States of Mizoram and Nagaland no Panchayats or Gram Sabhas have been constituted. FRA has recognised the “traditional village institutions” in States without Panchayats. Hence, in these States, the village councils or other local customary institutions have all the power, rights and functions of the Gram Sabhas in other States. This includes the power to protect and manage forests and other natural resources. Arunachal Pradesh happens to be the only state where this law is not adequately applied. This is because, unlike the other States where FRA is applicable and where the Scheduled Tribes and other traditional forest dwellers are in minority, various ethnic tribal groups whose land and forests are specifically identified with natural boundaries of hills, rocks, rivers and tributaries also domicile Arunachal Pradesh. Other than few pockets of land under

wildlife sanctuaries, reserved forests, most of the land in the entire State is community land. Territorial boundaries of land and forest belonging to different communities or tribes are also identified in the same line leaving no scope for any dispute over the possession of land, forest and water bodies among the tribes. Therefore, even if FRA is implemented in this state, the Act itself does not have much practical relevance in decision making in Arunachal Pradesh. The Ministry of Tribal Affairs (MoTA) also have quoted "the Arunachal Pradesh government thus: Unlike the other States where the STs and other traditional forest dwellers are in minority, Arunachal Pradesh is wholly domiciled by various ethnic tribal .....territorial boundaries of land and forest belonging to different communities or tribes are also identified in the same line leaving no scope for any dispute over the possession of land, forest and water bodies among the tribes. Therefore, Forest Rights Act does not have much relevance in Arunachal Pradesh". However, the fact is that about 61.55% of the State is forests. Half of these forests are "unclassed State forests" (31,466 sq. kms), presumably under customary or traditional control. Communities play an active role in managing the land and resources.

The villages inevitably control most of the forest areas. There are two forms of community forest ownership in West Kameng and Tawang district that I have documented village ownership and household land. Most of the forest areas, pastoral grounds and water resources fall under village ownership and small-scale agricultural lands fall under household ownership. The Monastery also owns some of the community land that can be used by local people under the monastery's supervision. Stones or natural rocks divide the boundaries of these lands. Villagers and pastoralists use these grazing grounds on a rotation basis. To maintain the quality of the grazing areas, herders follow regulations as per the traditional management system. The seasonal movement of animals from one ecological zone to another according to climatic

conditions and feed availability is a recurring feature of indigenous Yak grazing systems and even though such movement is routine, farmers and grazers operate under complex sets of arrangements and schedules (Dhital et.al, 1993). It is known that rotational grazing of the pasture lands according to feed availability in indigenous Yak farming system is a good practice to increase forage productivity at the same time. It has been reported that when farmers were made to follow a rotational grazing cycle, forage production went up by as much as 40% compared to those areas where this practice was disrupted (Dong *et al*, 2009)..As described earlier in chapter two, Monastery's taxation system plays an important role in indirectly managing the lands. Due to the religious attachment and sentiments towards the Tawang Monastery the penalty and tax still continues, and all of the tax and penalty charged in the region is still in the form of milk products or live animals instead of hard cash. This system has been found to be very effective and economically viable over hard cash because every time it needs revision, based on the number of livestock and milk production the amount of produce can be changed. However, as the market value of milk products and live animals increase with time, the value of tax and penalty charged automatically increase without any revision. Another role of the monastic administration is to ensure sustainable use of grazing areas by allowing the local villagers and owners to self-monitor their grazing areas. Villagers have the right to frame their own rules and regulations for grazing, which is decentralized in nature and provided enough space to the community. Whenever there is a conflict in land sharing, the village headman holds a meeting (mangzon) where land disputes are settled. However, post independence, after the region came under the jurisdiction of the Indian Government and with the detachment of the Tawang Monastery with the Lhasa Monastery, there were some major changes in the governance system. Tax collected by the Tawang Monastery from the Tawang district was no more shared with the

Lhasa Monastery. Since agricultural production declined due to the change in the landscape and various developmental activities, it was getting difficult for the villagers to provide agricultural taxes. At the same time, the Monastery itself received a large amount of donation from the government to give up their traditional taxation system. But due to religious attachments and rituals, the villagers from Zemithang valley continued to pay taxes to the monastery. But the administrative role of religious institutions over the villages started to decline. The rise in population also became another issue. At present the number of households per village varies from 35 to 100 houses depending on the size of the village, where as earlier number of households varied from 20 to 35 houses (*Khres original landowners of the valley).* With the increase in population of the village, number of cattle owners has also increased progressively. **Table 3** shows that present status of distribution of livestock across some of the villages. Some of the summer grazing areas post 1962 Indo-China war became restricted for the villagers to use because of various defence related issues and the year 1973 much of the summer grazing ground lands fell under the territory of China.

	Kelektang	Muchot	Kharmen	Lumpo
Number of Houses	35 houses 23 “khre”	60 houses 12 “khre”	50 houses 35 “khre”	51 houses 26 “khre”
Number of livestock owners	25	20	25	30
Number of yak owners	2	-	1	,4
Number of Cows	150	140	190	100
Number of Dzomos	-	-	40	50
Number of Yaks	120	-	20	100
Numer of Jatsamin	-	40	-	-

Table 3. Households and Livestock

However, according to villagers even with the increase of households, and decrease in livestock population they are still comfortable with continuing their pastoral activities.

Village forests management also followed a particular system. Villages or Mang would appoint *Menyer* to protect the forests. The village elders made most of the decisions and defined the function of the *Menyer*. The *Menyer* was given the responsibility to ensure that everyone had adequate firewood and construction timber. He was also responsible for enforcing *Reedam* (prohibition of forestry activities, including extraction of bamboo, and grazing during summer). The *Menyer* was paid by the villagers in kind and exempted from the obligatory service to the community like paying taxes. They regulate firewood, timber, cane and bamboo collection, monitor wildlife poaching and encroachment of forest land by villagers. They also monitor outsiders harvesting forest produce from their area and monitor water resources and prohibit people from other villages to use resources from their respective villages. However, like the grazing activity, this system started to decline, when the first Forest Act was passed in 1969. The institution of Menyer was nullified as many of the non-registered forest areas started to get declared as state property (Giri, 2004 p. 130-131). Known to be a top down approach, the Indian Forest Act (IFA) was implemented in 1865 and established state control over forests in Arunachal Pradesh after independence. Since diversion of forests and meeting international conservation goals were the two main aims of the act, the primary instrument for the latter has been the Wildlife Protection Act (WLPA) 1972. However, with the coming of the FRA, the power of managing the community designated lands have been given to the Gram Sabha (village council) at the village or hamlet level by the Sections 3 (2) (ii), 4 (2) (e), under the FRA. The FRA is also clear on the nature and specificity of the rights vested to forest people. When it came to managing village forests, lands and internal conflicts the villagers never had to depend on the FRA. However, with the increase in forest and pastoral land diversification for developmental activities there was a rise in court cases directing the government to consider claims under FRA.

According to research, diversion of forest lands under the Forest Conservation Act 1980 during the period January 2008 to January 2014 is 12,766 ha the largest amongst mountain States. These were going on because the forest rights were not being recognised and consent of Gram Sabhas, which are violations of FRA (Bijoy, nd. P 10). As Section 3 of FRA confers rights to secure individual or community tenure or both; right to hold and live in the forest land under the individual or common occupation for habitation or for self-cultivation for livelihood; right of ownership, to collect, use and dispose of minor forest produce; right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use; rights which are recognised under any State law or laws of any Autonomous District Council or Autonomous Regional Council or which are accepted as rights of tribal under any traditional or customary law of the concerned tribes of any State; right of access to biodiversity and community right to intellectual property and traditional knowledge related to biodiversity and cultural diversity; and any other traditional right customarily enjoyed excluding the traditional right of hunting, during the time of the Nyamjang Chhu Project the villagers found this as a strength to go against the developers.

Although over the years the power of traditional governance has decreased, from the above it is clear that the traditional systems of governance still plays an active role in resolving disputes and settling matters, with regard to soft crime, resource sharing, sharing of forest, water. Despite strict wildlife protection provided by the modern state, since the community have been so much of authority on their land it becomes an obligation for even conservation based working groups to become involve in modern conservation practices today.

Various anthropologists and advocates of the use of traditional knowledge would argue that despite the obvious value in offering a constructive perspective on resource management, the

use of traditional knowledge in different parts of the world has been under-utilised, ignored or subverted and rendered unscientific by reductionist science (Brokensha *et al.* 1980, Cruikshank 1984, Warren *et al.* 1995, Nuttall, 1998). Mark Nuttall (1998, p. 74) says, "by the standards and paradigms of Western scientific rationality, the legitimacy of indigenous environmental knowledge is questioned. It is not considered to be empirically-verifiable, and because it is not seen to be acquired as the result of experiments in laboratory settings, indigenous knowledge is regarded as inaccurate or irrational, or based on superstition. Scientific knowledge on the other hand is generalizable, addressing universal phenomena, 'a type of knowledge which tends towards disinterestedness…openness, accumulation…' springing from 'constructed, operative frameworks, which are justified by the results obtained' (Gurvitch 1971, p. 33)". For example, in Dirang of West Kameng of Arunachal Pradesh, the government has established the National Research Centre on Yaks in 2008. Few of the main objectives are to conduct scientific research on yaks. By conducting surveys on genetic resources, management practices, production level and problems associated with production, a small herd of pure yaks is established to carry out observations on performances, research on improvement of yak and its products through selection and breeding with exotic frozen semen, they are aiming to improve the deteriorating population of yaks. The centre also tries to support the local community by helping them with medical support to cure health problems of the local yaks. However, for many local people the centre is not very helpful. This is because, for years they have developed their knowledge to heal yaks using herbs and traditional medicine from the forest. Some people who still own pure breeds of yaks gets offended when they realise the scientific institute is not much of an help, and for many others, they are indifferent towards their knowledge because they don't even keep pure breeds of yaks as a livestock because they prefer mixed breeds. Thus, in this context, there is not

much of a congruency between application of scientific rationality and traditional knowledge of the local people.

4.6 Traditional Knowledge is "*Rational*" as Scientific Knowledge:

As mentioned earlier, with the increase in resistance from the margins, the use of "traditional ecological knowledge" in the discourse of wildlife management practices or natural resource management has become place common across the world. Among various forms of biodiversity conservation strategies, such as protection by isolation, education programme, ecotourism, mitigation offset schemes, payments for ecosystem services, rewilding programs etc, "community-based" conservation has been recognised as one of the most successful ventures by stakeholders today (Bushcer et.al. 2012).In the past decade, with the increasing number of research, publications, conferences, symposiums, workshops, India has witnessed a movement and rise in research and working groups that are shaping this present neo-liberal conservation strategies in the country. This movement is not confined to India, but has been influential across the world, especially with a focus on places that have been identified by NGOs, working groups, scientists to be environmentally threatened (Buscher et.al, 2012). The main objective of this activity is to collect and document traditional knowledge and to integrate it with scientific knowledge of the environment, but most of the time the approaches undertaken by different actors like NGOs, conservationists and scientists differ significantly, which does not always work in the favour of the people. For example, Neil Adger says, different disciplines formulate their own understanding of human and environment relationship based on their objectives. There are various formulations and research methods catering to different objectives of the respective researches. Research on common property resource understands the importance of social,

political and economic organizations and the dynamic interaction within them (Adger, 2006). On the other hand, ecological economists, use natural capital as the interactive link to study society and environment (Constanza & Daly, 1992). Contrastingly, adaptive management discusses the unpredictable symbiosis between human and environment based on the different understanding of human environment interactions, the idea of what the community's or environment's threats also varied. The experts on common property resource consider a community vulnerable to environmental changes only if it disrupts the socio economic and governing systems of a community (Gunderson, 2000). Elinore Ostrom shows how, in Nepal, due to the presence of a dualistic governing system, the communities' common property management is affected (Ostrom 1990). However, an ecological economist will consider a community to be threatened only if it loses its access to natural resources, which are considered commodities. But overall, the main hope is that, by integrating traditional knowledge with scientific knowledge we will enhance our understanding about complex environmental issues, socio-environmental dynamics that will in turn improve our existing conservation practices. At the same time, by integrating aboriginal or traditional knowledge, one could also empower indigenous communities who have been marginalised throughout history (Nadasdy, 2003, p.114). This approach is widely discussed and practiced by conservationists like Henry Huntington (2000), Mishra (2006, 2003) and has been quite a successful model in some regions. Other than the disciplinary differences, despite efforts by countless scientists, resource managers, aboriginal people, and social scientists to develop a method for integrating scientific and traditional knowledge, there lies a problem in achieving the integration process. This is mainly because many are still not quite sure about the social political history of the region, what is traditional knowledge, how to use or integrate it with scientific research, or to question the final outcome of this integration process. For example, some recent

scholarships have questioned the TEK literature, saying that a large proportion of it still focuses on the potential use of TEK rather than on actual applications (Kuhn and Duerden 1996: 79, Nadasdy, 2003).

In the eastern part of Arunachal Pradesh conservationists and wildlife biologists have successfully engaged communities to take part in species conservation. Aparajita Dutta, a renowned wildlife biologist, has worked extensively for several years with the Lisu community in Arunachal Pradesh. Being a wildlife biologist, and working for a research-based conservation organization NCF (Nature Conservation Foundation), she has advocated the importance of acknowledging the "traditional" subsistence livelihood practices like hunting, grazing, fishing of many local communities in different parts of the country, especially Arunachal Pradesh. She emphasises the fact that the current conservation attitude of excluding forest dwellers or indigenous communities among the middle class or mainstream conservationists needs to change and one must acknowledge the cultural, social and environmental significance of the complex livelihood practices of the people to facilitate conservation objectives in the country. Her work among the Lisu community has not only received recognition, but her various strategies for integrating traditional knowledge in scientific wildlife conservation policies, through awareness generation, involvement of non-government organizations, community-based wildlife management, dialogue, have contributed to the development of a "successful" model to attain holistic wildlife management in the country. However, in her writings on the importance of traditional knowledge, she has attempted to legitimise traditional knowledge in regards to the logical reasoning of western scientific knowledge (Dutta, 2007; Madhusudan et.al, 2006).The Lisu community practices traditional hunting in the eastern Arunachal Pradesh. She initiated a community-based programme in and around the Namdapha and Pakke Tiger Reserves that

worked on the participation of the tribal communities in the monitoring and conserving of the hornbill.

Datta partnered with the Nyishi and Lisu communities and the state Forest Department to script a remarkable turnaround in the bird's life story, with a decline in its hunting, protection of nests in the area, and significant improvement in overall habitat. Datta pioneered this Nest Adoption programme, under which financial support comes from urban citizens faraway who act as foster parents by adopting hornbill nests, while local people look after the nests to ensure they are not disturbed or cut down. The reason why Dutta could achieve this is because she had spent a considerable amount of time with the community, engaging with them to understand the socio-economic aspects of hunting, with a goal to achieve the western standards of conserving practices. Not only Dutta, but working groups around the world are adapting to this new approach to integrate community for conservation of certain species. Many would argue against hunting practices around the world by saying that indigenous communities were natural conservationists and sustainable hunters because they used to perform hunting with their traditional weapons. However, with the scientific and technological progression, they have switched to modern weapons like guns, which make hunting practices "non-traditional" in nature (Ayadurai, et.al 2006). As the larger picture of hunting practices portrays it as a traditional livelihood practice, carried out for the community's survival (Dutta & Kumar, 2005), commercial hunting is one of the aspects which has lead to the working groups question the traditional hunting practices.

However, it has been documented that for the eastern Arunachali communities hunting is one of the most important aspects in their lives (Sen & Lalhreitpui, 2006). For such a community the purpose of hunting is much more than just survival. In other parts of the world anthropologists have documented that hunting is not only a simple matter of killing animals,

rather it is a set of practices that are deeply embedded in a specific set of social relations and ideas about how humans should relate to one another and other humans. (Nadasdy, 2003 p.63) Infact, this idea evolves and changes with the change in the social and cultural structure. Thus, one cannot simply scientifically rationalise the concepts of commercial hunting out the social setting. Over the past couple of decades or so, interest in studying indigenous knowledge of land and animals has grown dramatically across the Arctic and Sub-Arctic regions (Nadasdy 2003; Nuttall 2000; Anderson & Nuttall 2004). Much of the effort by the ethnographers have gone in collecting and documenting this alternate form of knowledge, where ethnographers tried to understand how these knowledge systems were incorporated into legal, scientific, bureaucratised structures of the state. Bronislaw Malinowski (1954) argued against the idea that magic, science, and religion are evolutionary stages in the development of human thought, as had formerly been supposed. Instead, he says, these concepts should be seen as distinct modes of thought that can and do co-exist in people's minds. Malinowski's approach to knowledge has a number of important implications. Based on the scientific rationale, if all cultures possess science (i.e., practical empirically-based knowledge about the world), then the empirical knowledge of one culture should be comparable to that of another. In other words, community's practical value should be independent of cultural context. To incorporate traditional knowledge in western scientific conservation regime, knowledge about wind and tides, wildlife, nature should be of equal value to all mariners, whether they be European sailors or indigenous groups. This in fact is the reason that underlies projects of knowledge-integration today. In the spirit of this tradition, practitioners and human right activities around the world are currently arguing that indigenous knowledge systems are empirically valid. Thus, in the present time, Nadasdy (2003) argues that communities today claim that alternate ways of knowing are just as rigorous and empirically

based as is science that can and should be integrated with science and given equal weight age in making decision regarding management and policies. This whole approach to knowledge and knowledge integration assumes that discrete elements of Aboriginal peoples' cultures (i.e., their empirical knowledge) can be extracted from their socio-cultural context and then inserted into Euro-North American institutional and ideological contexts while simultaneously retaining their utility, meaning, and even their "Aboriginality". However, anthropologists have highlighted that only taking or extracting traditional knowledge from its social and cultural context and integrating it within a management process is problematic. Nuttall (2000) says every aspect of the daily life of a community is important and has a complex connection with the surrounding environment. One cannot simply pick a ritual, or a tradition and insert into a western management system. Among the Inuit of Greenland, for example, Nuttall discusses that when a young boy goes seal hunting for the first time, and when he catches his first seal, he transforms from being a young boy to man. It is the boy's "right of passage", where every step of this transformation is crucial. At the same time in this process the bond that human shares with nature is very complex, because the community thinks animals are a non-human form of intelligent species that challenges the young boy to reach his manhood. This process of hunting and transformation of a child to an adult happens with the help of the animals and is very dramatic leading to the "the first catch celebration". Thus, hunting is not only a production of man skill knowledge and power, weapons, equipment, it is also about ability to maintain the dog team, to take care of the boat, travel long period, be self sufficient.

Bourdieu (1977) argues that the complexity of social life and the knowledge of how to become social is not something one accomplishes or achieves based on rules and normative models that can be empirically generalised or incorporated in traditional management regime.

According to Palsson's argument for the acquisition of fishing skill in Iceland, hunting and fishing is not simply the matter of becoming skilful or knowledgeable about how to catch animals, but is achieved through active and continual engagement with the environment where hunter travels on the sea every day for long distance and the whole experience is a process complemented by rituals and the rites of passage take place. (Palsson, 1998). Nuttall (2000) writes how hunters in many parts of Greenland have often said hunting is in a sense a lengthy apprenticeship that continues throughout a hunter's life. The hunter is always acquiring new knowledge as a result of his engagement with animals and the environment. A person has to appreciate nature and understand wildlife to be able to manage wildlife. Thus, when the knowledge is transferred, these small building blocks that build traditional knowledge is left behind, and in the process it gets bureaucratised and adulterated. Thus, in many places instead of conservation of wildlife and natural resources, there are dramatic declines of caribou and reindeer populations (Anderson and Nuttall 2004), overexploitation of fish (Palsson 1994), as well as further marginalization of communities. With the change in socio economic and political structure of the Arctic and with the geopolitics of climate change no community is remote, pristine or “purely traditional”.

According to Evans-Pritchard (1937), it is not easy to distinguish between people’s “rational” knowledge of their empirical reality and “non-traditional” beliefs about the world around them. In his work on witchcraft among the Azande, he shows that their “non-rational” beliefs in witchcraft provides a structure for their social relations, thus the Euro centric view of what is known as irrational is basically an important aspect of the community. Hence, to have a holistic management system, it needs to be understood that the present path of integration of scientific knowledge with indigenous knowledge is flawed. One has to identify these micro

aspects of traditional knowledge, the heterogeneity within the community and the complex human-environment relationship of community with nature before implementing conservation policies and plans in the circumpolar region.

In places like this eastern Arunachal Pradesh where communities have adapted or adapting, to the modern conservation system, but in many places communities, have expressed dissatisfaction and impatience with the current efforts to use TEK in modern practices (Collins, 2002). Some voices from the local people have showed indifference, where as some have shown great enthusiasm and satisfaction. In case of regions like the Arunachal Pradesh, the local people in one way or the other are connected to the national and global mainstream. They are clearly aware and part of the western rationalisation of scientific knowledge of wildlife conservation, development and socio-economic changes. However there is also a traditional way of connecting with their surrounding nature through rituals, religion and livelihood activities which is not really a form of knowledge but more of a way of life. Thus, the question arises of what triggers some communities to adapt to modern conservation practices whereas for others it is a place of conflict.

4.7 Conservation in the Zemithang Valley

Unlike some other parts of the world, where traditional hunting is one of the major issues that heightens the conflict between conservationists and the local community, the Zemithang Valley does not have that problem. The valley itself has restrictions over hunting practices. Since most of the population is very religious by nature, they only consume meat on certain occasions. Only when their livestock dies do they consume that meat, or during religious festivals, like Losar (the Tibetan New Year) they would sacrifice yak or mithun. Although among Tibetan Buddhists a

vegetarian diet is encouraged, in many other parts of Tawang and West Kameng where Tibetan Buddhism is practiced many people still consume meat. There are two ways of looking at this. In West Kameng district, where most people are Dirang Monpa, Buddhism is a religion that was not introduced to them until later. Areas such as Shertukpen, people used to practice animism, until they were introduced to Buddhism. This is why there was an intermingling of culture, tradition and food habits. In the region like Dumkho (a village located in the higher altitude of Shertukpen), there are still some people who hunt bears or other animals. Earlier most of the hunting practices were for meat and now for selling bear parts in the market. Unlike these areas, the first settlement was of a Buddhist Tibetan population, so there was not much acculturation until recently. The second reason why people of Zemithang Valley don't hunt or the reason behind hunting is banned in Zemithang is because of the social side of the community. As mentioned earlier, since pastoralism is the main livelihood activity that people are dependent on the social dimensions and food habits revolve around pastoralism. Also, other than pastoralism small-scale agriculture is also practiced in the region, and the main crop that is widely grown here is Moruwa (Millets). Due to the rugged terrain and temperature, Millets is a kind of crop that grows well (Michaelraj & Shanmugam 2013). Thus their local food is generally *zen* (millet proidge) with *Churpi. Churpi*is used in most of their local dishes. Even with introduction of new food habits like rice, chicken (that they have to buy from the main Tawang Township), on a regular basis people still ate food made with *Churpi*.

This shows the integration process is not only different from one landscape to another, but also impacts different generations within a community or a region differently. There is a critical division that still exists between those who study 'nature' and others who focus on 'society'. Such a divide is by no means peculiar to India: a mutual 'gulf of incomprehension'

often separates the two. Those who study society are not even expected to think critically about nature (Wyllys, 2003). Those who look at ecosystems assume these are self-contained assemblages of plant and animal communities, forgetting that they are home for humans too (Worster 1996). As we can see, concerns over society is lacking in the region. Most of the emphasis has been given to environmental protection. Working groups have been striving to achieve social development by simply integrating it with environmental conservation. Thus, in the next chapter I will be highlighting three important points. First would be the process in which working groups or NGOs understand and integrate traditional knowledge and what are the main politics behind this integration process. Second would be what are the setbacks of this community based on, traditional knowledge based conservation practice and how the negotiation between various stakeholders reforms the existing knowledge and produces new knowledge.

Chapter 5

Traditional Ecological Knowledge:

The simultaneous growth of knowledge and ignorance

In recent decades, NGOs and their activities have become an important area of focus for anthropological enquiry and practice. As mentioned earlier, NGOs have seen growth as important stakeholders in different parts of the world in the past few decades, and have been mainly playing roles they consider to be of importance for contributing to non-governmental advocacy, for indigenous sovereignty, biodiversity conservation, and so on. West (2001) says that NGOs are an extension of civil society and the public will (Wapner 1996). They are also bureaucratic apparatus that produce, circulate, and then act upon particular discourses about people, nature, and culture. With these discourses, NGOs set the tone and attempt to influence regional, national, and international agendas regarding many social and environmental issues, seek to frame and influence public action, and garner public support for their campaigns and activities (Weeks 1999:19).

As I also discussed earlier in this thesis, there was a time when NGOs drew upon and used colonial methods for protecting wilderness to conserve the biodiversity of a region. Though still practiced in parts of India, the colonial/American exclusionary model of conservation started to come under international scrutiny in the 1980s. Conservationists argued that the exclusionary model of protection and such like interventions were not successful because the livelihoods and rights of people living on the periphery of the protected areas were not recognised and so communities were marginalised even further when conducting their traditional subsistence practices (Brown and Wyckoff-Baird 1992; Wells and Brandon 1992:ix). With the development

of the "integrated conservation and development project (ICAD or ICDP)" or co-management practice model (Bonner 2002 p. 253- 270), national and international working groups concerned with conservation and environmental management have been drawing on this approach since the 1990s (Wells, Brandon and Hannah 1992), by incorporating the language of "local participation" into their rhetoric and practice. Their argument is that people living adjacent to protected areas used the resources they were trying to protect and that if they were provided with an alternative source of income conservation interventions would be more successful. However, West (2001) says that this approach of providing economic development options for local people is a means towards and ends for biodiversity conservation and not an end in itself. This method for the design and implementation of conservation projects generally relies on extractive reserves, eco-tourism, non-timber forest products, green marketing, and adventure tourism and conduits for the capitalization of village life. In places where there is a large indigenous population, especially like Northeast India, implementing co-management is in fact the only option, as most the lands are owned by the community.

Fig 7: NGOs interacting with villagers by Participatory Rural Appraisal (PRA)

In the case of Arunachal Pradesh, while I was working with WWF-India one of the main aims of co-management practices was community development along with biodiversity conservation. I realised that the fundamental premise of these projects is to protect the biodiversity of an area, for which local development priorities generally take a backseat. Conservation is always prioritised to strengthen the protection of the habitats for certain species. At the same time, what I also came to understand was that practices of conservation are not aimed mostly to protect the landscape. Most of the biological research and conservation practices are oriented towards protecting certain species of flora and fauna. Even conservation initiatives for protecting wetlands and grasslands are aimed to protect the habitat of particular species. It was also interesting to see how certain animals are given more importance than the others.

Even though many biologists and conservationists argue that it is better to manage endangered species with ecosystem or landscape based management (Lindenmayer et.al, 2008; Noss et.al 1997), the working groups are unable to do so because most of the projects are largely driven by external funding agencies, whose main agenda is to protect charismatic species. Thus, all the activities at the community level, whether it is community development through eco-tourism, or providing electricity to a village near the protected area, is in reference to a particular kind of species. When I was working in the India-Nepal border region on trans-boundary mitigation of human-elephant conflicts, one of the ways to address this issue was to engage the community to start community-level tourism that would attract visitors to come and see the elephants in the wild, from close vicinity. In case of the Sunderbans delta, most of the villages situated near the national parks do not have electricity. To provide electricity, conservation-based organizations have tried to introduce solar street lights and home lights so that they can reduce human-tiger conflicts, as those areas are prone to tiger attack. Most of these ideas to engage

community in wildlife conservation and community development are proposed by experts. But since the communities are promised something in return like tourism, jobs, or basic amenities like water and electricity, such projects attract communities to engage with the working groups. However, despite all these efforts, over and over again we see that the ultimate aim is the protection of certain animals. The Kaziranga national park is one of the major examples that support this point. Over the years, Assam has been recognised for its rhino conservation. Kaziranga has over the years become a tourism hotspot in regards to the national park. Studies have showed that hundreds of hotels have mushroomed which are benefiting many local communities. However, the growth of such business has led to an emerging concern among conservationists as it might have negative impact on the wildlife of the region. The rise in conflict between forest department and communities reached such a critical extent that one or two villagers are usually shot by rangers in any form of conflict for the protection of the rhinos.

> "The park rangers have a lot of authority. At one stage the park ranger were killing an average of two people every month- more than 20 people a year. Indeed, in 2015 more people were shot dead by park guards than rhinos were killed by poachers" (BBC).

In all these cased, the species deemed by conservationists in need of protection remains the centre of the discussion. Keeping certain species as the reference point, thus makes the community/people just one of the components (like the habitat, or the landscape) that contributes to the existence of that species.

Hugh Raffles (2010) describes this animality or human-animal relations through "objects" (both human-non-human entities) that are placed in the range of a scale. He raises questions about the practice of substance, place, and temporality through close attention to and accounts of objects that range in scale from landscapes to even non-living monuments and to

stones and pebbles. His work not only contributes largely to multi-species ethnography where people study the relations between humans and animals and the interrelations between various non-human species and entities and how they are situated with human beings. Animals cannot be generalised as just a group that need to be protected. How this plays out in India is, as we have already seen, evident through the historical colonial practices relating to how certain animals have gain more importance than others. For example, big cats like tigers have over time gained more importance than reptiles, birds, meso-carnivores etc. during the colonial and post colonial period. But as an ethnographer it also makes me question how the scalar relationship between various animals change with the change in discourses in which it is situated and present. In my research on the construction of large hydropower projects and the socio-political and environmental change within the Monpas, I noticed that the temporality of certain species changed in a very short period of time. This changing importance of certain species that need protection did have scientific evidence backing up the arguments, but also was part of a pure political process. Some animals in Raffles' words can be explained as "The Animal", over a period of one year scaled down to "An Animal", where as an animal scaled up to become "The Animal". This in return changes the positioning of the community not only within the organizational scale, but their surrounding environment and their idea of place. As in the case of Zemithang Valley, the primary reason for the halting of the dam was because of the site of the dam was being built on the seasonal winter habitat of the Black necked crane. The Black necked crane has always been recognised as a threatened species by IUCN, and developmental activities on that land became a legal offense. Though, biologists have conducted extensive scientific research on the habitat, distribution, and activity patterns of this species (Khacher, 1981; Chandan et.al 2014), until the dam was being planned, very little importance was given by

conservationists to protect the habitat of "a" Crane. Most the importance was given to species like the Red Panda, Snow Leopard and the protection of their habitat. As a result, with the building of the dam, followed by the barriers to participation, lack of inclusion, nepotism, power dynamics, and the politics of resistance shifted the Crane from being "An Animal" to "The Animal".

5.1 Dams and the sudden change in the scalar relation of animals:

'*Till yesterday, those experts were talking about was the preservation of Red Panda, and all of a sudden, with the controversy surrounding the dam, people are shouting about the black necked crane. 'I don't understand, suddenly, how this bird became so important for conservation. Till last year, organizations like WWF were only concerned about saving the Red Pandas of the Zemithang Valley. I don't think, the people of Zemithang are very concern about the bird. The bird is a hindrance to our development. We need development in our region, our children's future is more important than conservation of biodiversity'* -Local AnchalSamithi Member, of one of the villages in Zemithang Valley (Personal Interview, 2016)

Studies of animals and humans have a long history in anthropology. Lewis Henry Morgan's (1868), *The American Beaver and His Works* show how animals have been a central of discussion in the discipline. Here, Morgan studied the "acquired knowledge" of lodge, dam, and canal building transmitted among beavers. Drawing parallels between the engineering knowledge of people and of beavers, one among many species of what he thought of as clever animal "mutes," Morgan articulated an argument for animal rights: "The present attitude of man toward the mutes is not such, in all respects, as befits his superior wisdom. We deny them all rights, and ravage their ranks with wanton and unmerciful cruelty" (Morgan, 1868:281–282; Feeley-Harnik, 2001). In the late nineteenth century, at a moment when anthropology was a field

of natural history, scholars like Morgan worked across the boundaries between the social and natural sciences. Many of Morgan's contemporaries engaged in what might be regarded as comparative multispecies ethnology. Multispecies ethnographers are studying the host of organisms whose lives and deaths are linked to human social worlds. A project allied with Eduardo Kohn's (2007, p.4) *Anthropology of Life*—"an anthropology that is not just confined to the human but is concerned with the effects of our entanglements with other kinds of living selves" —multispecies ethnography centers on how a multitude of organisms' livelihoods shape and are shaped by political, economic, and cultural forces. Studies of hunting, husbandry and the role of animals in systems of totem and taboo featured prominently in classic 20th-century ethnographies. Evans-Pritchard, Douglas, Levi-Strauss, Radcliffe-Brown, and Leach are some of the best known and most influential in this literature. Such work grew out of long-standing interests in anthropology with systems of animal and natural classification (Bulmer 1967). The new animal anthropology joined established, ongoing conversations in human–animal studies where Donna Haraway's (2008) work drew upon this emerging sensibility, arguing that animals are not just "good to think" (as Levi-Strauss had it), or more instrumentally, "good to eat" (as Marvin Harris countered), but were also entities, and agents, "to live with." That "living with," of course, takes a variety of forms. It might be as companion species (Haraway 2003). It might be as creatures with simultaneously parallel and entangled biographies, like the primates studied by ethnoprimatologists. Or it might be a major stakeholder that changes the power dynamics between the developer and the marginalised community (Nadasdy, 2007; Kosek 2006). In the case of Arunachal Pradesh, the Black Crane acts as a stakeholder. This can be described as a form of "neo-liberal" form of conservation. Conservation conventionally is conveyed as something different, as ''saving the world'' from the broader excesses of human impacts under

capitalism. But, according to Bushcher (2012) in actuality it functions to entrain nature to capitalism, while simultaneously creating broader economic possibilities for capitalist expansion. It has been understood that markets expand as the very resolution of environmental crises that other market forces have produced; like the case of Zemithang Valley, the building of the dam produced a market and opportunity for conservation of Black Necked Crane to flourish. Thus, conserving nature, paradoxically, seems to have become the friend of capitalism. But, instead of alienating people this kind of crisis driven community based conservation embraces community further into capitalism. But in this process the initial knowledge and understanding and relationship of the community with their surrounding nature and animals is either lost, reformed or a new kind of knowledge is produced. In this neo-liberal conservation model language plays an important role for conservationists, experts and working groups to mobilise communities towards the neo liberal conservation framework. Below I have provided a detailed description of this process.

5.2 Treasure Hunt: the Conservation of Snow Leopards in the Himalayas

Snow leopards (Pantherauncia), are predators from the cat family that happen to be native to Central Asia and the Himalayas and are known to be world's most elusive cats. Studies have also showed the estimates vary significantly but there might be a few as 4,000 snow leopards remaining in the wild. In India, most of the research on snow leopards has been conducted in the western Himalayas (Fox et.al 1991; Hussain, 2003). The terrain and geography makes it feasible to do research in that area. One of the main aims for all these studies has been to restore, recover and reconnect the landscape for snow leopard management. Since the habitat of this species is around 3,000 to 4,500 metres and sometimes can be seen around 5,500 mt, accessing those field

sites are quite difficult. Especially in case of Arunachal Pradesh where this area lies above the tree line and mostly are places which are the summer grazing areas where the herders take their livestock in the summer. There have been many studies conducted by snow leopard biologists around the world on prey predator relations (Lovari et.al , 2009; Bagchi & Mishra, 2006), and it has been understood that the increasing habit of preying on livestock in high altitudes poses a main challenge to the management of the species (Graham et.al 2005; Sharma et.al 2015; Suryawanshi et.al 2013). These studies reveal that there is an increase in livestock population which is becoming a competition for ungulates like bharal, blue sheep in these areas which are supposedly the natural diet for these species. Interviews have also been conducted by biological scientists, where herders have showed concerned over the loss of livestock which in return impacts them economically (Suryawanshi et.al 2013). Thus, to address the economic loss of the herders, and the to protect the habitat of snow leopards, organizations have been working closely with communities to address human-animal conflict and to formulate co-management system incorporating “scientific knowledge” and “traditional knowledge”. Other than grazing domesticated livestock, the other factors that have been impacting their habitat are various developmental activities like road construction for army usage. Though these regions do not have permanent settlements, in recent years a large military presence has impacted their habitat. So, to manage the region conservationists are also trying to work with the government, community and the army to conserve the species.

During the first week of July 2016, by the time I had already spent almost a month in West Kameng and Tawang district, I heard that snow leopard experts would be arriving to talk to the community and provide local people field training for how to estimate the snow leopard population in the area. The day-long event was held in the Inspection Bungalow in Zemithang

Valley. The place being a local meeting point for most of the events, many people were invited to take part in the workshop. It was a simple setting where there was a white screen for a power point presentation and the front row had two couches, which were dedicated for the guest speakers, the organisers, the circle officer, Zemithang Youth Committee members. Behind the couches were chairs where men and women from different villages sat. This seating arrangement is common in every event or workshop that I have attended. Though many times the villagers are asked to come forward and sit along with other people, they prefer not to. These power dynamics are ingrained and quite visible, because most of the people who sit in front have always represented as "experts", "educated" or holds an important position in that area. Many government officials also get offended if they are not treated with extra respect or treated similarly as any other local people in the community. Though theoretically all the stakeholders are present in one setting, this seating arrangement and unsaid power dynamics itself becomes the first default hindrance towards co-management or interdisciplinary knowledge integration.

The experts stood up and introduced themselves. There were altogether three presenters. The first who heads the programme, the second who will head the project and the third who was the field officer from the Monpa community and coordinates field work, field volunteers, community meetings and all the ground level work. The power point presentation started with visuals and camera trap[29] pictures of snow leopards and then the speaker started introducing the audience the technical importance of the species. The objective of the training was quite clear. The technical training included the ways to collect data, signs and habitat, documentation of evidences and he social training/ awareness included the reason why it is important to protect

[29]A **camera trap** is a remotely activated camera that is equipped with a motion sensor or an infrared sensor, or uses a light beam as a trigger. Camera trapping is a method for capturing wild animals on film when researchers are not present, and is used in ecological research.

these species. I remember very clearly how fascinated the people were to gather this information and the process of documenting the signs, pug marks, and claw marks on the stones and ground also seemed to me like a treasure hunt. Initially the questions were only from the front row audience, but with time the back benchers started to open up and ask some questions. One of the other reason why the local people were asked to be part of it was also because of the people are herders and they take their livestock to high altitudes for grazing. The team leader started asking them few questions which changed the direction of the interaction. The first question he asked was that if anyone had anyone ever seen a snow leopard? There was quite some murmuring among the audience, but in conclusion it was to my surprise that no one had ever seen a *Thakshem* (The word used for snow leopard in the Mago-Thingbu area). In fact, they also did not have a name for the species. As mentioned earlier, people in Zemithang are still practising traditional pastoralism, but over the years there has been a change in livestock patterns. Most of the people own cows, or a hybrid of cows and yaks, but very few people have pure breeds of yak. This is why many people do not even have access to those areas, which are the snow leopard habitats. Some villagers said that "there are one or two older people from the village who still have yaks as their livestock, but they rarely come down the winter grazing grounds. They mostly stay in the summer grazing grounds all around the world to look after their livestock. There is a chance only they have seen a snow leopard". After the presentation, it was evident that the villagers were excited to be part of the project, but the participants had no "traditional knowledge" to offer in return. Vitebsky (1993) says that to understand the truth value of knowledge, one has to understand the notions of adequacy, appropriateness and context in which knowledge functions. "Knowledge now appears as a collective term for thoughts about the world which give to their thinkers the conviction of commanding that area of experience to which those

thoughts refer. These thoughts remain part of 'knowledge' for if they continue to exert this command and to satisfy this conviction. Yet under certain circumstances, experience can move away from the certainty of knowledge, defy it, and slip out of its grasp. An entire system of knowledge, or parts of it, comes to appear ineffectual in the face of reality. This is the area of doubt. This is not because the knowledge was bad knowledge (like Frazer's interpretation of magic as bad science), but because the scope and expectations of its application have changed". Conservation organizations have been working in this landscape for a long time. Specially, organizations like WWF- India who has been working along with the community for about a decade. Thus, people are aware that every time there is a meeting that is organised by them they always approach it with a positive attitude to seek opportunities. The reason why the villagers were part of this event was not because they are concerned or interested in the conservation of snow leopard, or to share their perception of the Snow leopard but because they are constantly looking for livelihood possibilities or to secure opportunities offered by various stakeholders coming from outside the area. During the break I spoke to one of the villagers, who said

> "In the present scenario, when every day we are seeing some form of change, like dams being built, army encroaching our grazing grounds, any form of jobs or financial security can be useful. On top of that, what they are doing is for a good cause. *Pangchen Valley* (Zemithang) has a history of protecting biodiversity and animals, so in return if we get paid for it, it is very good" (personal interview, 2016)

Informal daily wage labour is a very common thing. Hourly wages of Rs. 200 for men and Rs. 150 for women are the regular rates for the people mostly involved in unskilled labour work such as road construction, building bridges etc. With almost no other opportunities for employment, infrastructure construction, skilled labour training, and manual labour is encouraged in the

region. In conversation with some of the youth volunteers from Nehru Yuva Kendra -National Youth Voluntary, says that "even if the government of international organizations are trying to bring in small scale village level development by shifting the mindset of young people from manual labour to alternative sectors like NGOs, social and developmental working groups, people are hesitant to get into field".

UNDP as an intergovernmental organization has recently started to collaborate with India's under developed districts in various states to train youths on skilled labours for placement oriented development. After these training sessions, youth can form working groups or NGOs or even become entrepreneur and pitch for funding from the government offered funds under DRDA.[30]However, most of the youths who are part of these projects are from Tawang Township or places which are closer to the town where getting any form of information is easier. Other than distance, accessibility, isolation, awareness, there is another important social aspect due to which daily wage labour is still encouraged in the region. As per Sange Doohde, father of Sange Leki's (school teacher, member of youth club), manual work is socially and politically ingrained among the Monpa's. "During the time when we had the mandatory taxation system of the Tawang Monastery, we had to work very hard to fulfill the needs of the Monastery. Though we were very religiously committed, it almost felt like dictatorship. Taxes were too high and the productions were quite low. People had to do a lot of physical work to meet the requirements. However, post 1962, when the central government abolished the taxation system, we continued it. However, it was the same time we were simultaneously introduced to easy and accessible small scale labour jobs. It was a much easier life. Even if one is making Rs. 200 on a daily basis and spending it all on alcohol in the evening, family and society still appreciates them, thinking

[30]DRDA: IT is a principle organ at the district level to oversee the implementation of anti-poverty programmes of the Ministery of Rural Development.

that they are "at least" going out there to work. However, in case of some educated youths who are trying to learn some technical skills to do something big in the future, and chose not to do labour work, they are frowned upon. But, with so many dams being built, there will be people migrating in from other parts of the country and there will not be these small-scale opportunities, so one has to think big about our uncertain future" (personal interview, 2016).

In some areas, the army has built a strong relationship with the people. The army area near the Lumpo village gets small daily jobs on a regular basis. Like carrying goods, carrying army rations etc. For every trip of carrying goods to the high-altitude army areasfrom the main town they even get up to Rs. 11, 00. Since it is a lucrative job and to avoid any form of conflict in the villages, villagers do it on a rotation basis. Mona Bhan writes about contemporary Indian Border States and their relations with the army. Her ethnographic work on the western Himalayas is about the change in relationship of the army with the Brokpasin in the aftermath of the Kargil War[31] (1999-2012). Bhan's exploration of how "the tropes of healing and heart warfare became tools to normalize state-centric visions of territory, sovereignty, and democracy in postwar Kargil" is the heart of her narration (Bhan, 2013 p.7). Bhan does excellent ethnographic work discussing the Hill Council and Operation Sadhbhavna (Operation "Goodwill") in terms of new possibilities and demands for Brokpa political participation and how the army is trying to achieve them. Participation here is national, appearing as a way of advancing the Brokpa community, if not certain individuals, in terms of both democratic governance and military labour.

The approach of warfare to welfare, nationalization of frontier states is something that the military wants to achieve even in west Arunachal Pradesh. Not only in Arunachal Pradesh, but in

[31] Kargil War was an armed conflict between India and Pakistan that took place between May and July 1999 in the Kargil district of Kashmir and elsewhere along the Line of Control (LOC)

all of Northeast India since the region never had a good administrative relationship with the centre, security forces of the borderline states always try to improve their reputation by getting involved in various welfare schemes. According to Karlsson (2011), the so called smiling-policy-distributing medicine and food rations to improvised villagers, and strategic participation in public events like the Horn Bill Festival in Nagaland (Karlsson, 2011 p.52). The political symbolism is quite evident and similar even in the two and a half months that I spent in the region. From participating/attending local religious events and festivals, lending speakers, providing extra military rations, diesel for local cars are some of the things that they do for the community to help them on a regular day to day basis. Over the years, every work in the region have thus been rationalised in term is daily or immediate small scale earnings. Thus, for even organization to work in the region, they must pay the local people a daily wage labour to do field work. Since the economic earnings of the local people of the villages have a complex social history, a lot of times, the conservation efforts are not translated in the right way. For some people working for organizations whose objective is to protect the habitat of *Thungmo* (Red Panda), can be same as working as a daily wage labour. For others, it can be a step towards bigger change to implement conservation agenda, where as for some it can be an adaptation strategy to cope with the uncertainty of the ongoing dam constructions. Beckmann says, adaptation in its social aspects notwithstanding, a process involving individual people, who react to their social and physical environment according to their view of the situation, their knowledge of the 'realities' they have to face. This knowledge is usually dubbed the 'perceived environment' (Hardesty 1978) and as such is thought to be the mediating factor between outside change and cultural reaction. Since different individuals with different experiences perceive their surrounding change differently there is also a way in which the organizations have adapted their

ways and means to interact with community based on their reactivity. Beckmann says, in many cases, villagers are thus confronted with local versions of bureaucratic or technical terms. Villagers are thus confronted with local versions of state development law which often have nothing to do with the original version. Their reaction to the local bureaucrats' demands or decisions depends on how they interpret that local and not the original version. These interpretations, as well as the ensuing behaviour, are related to and conditioned by the institutional context and the system of relationships in which the villagers live, the other rules and procedures which they consider to be relevant for their activities, and the consequences to be expected from the behavioural options they consider (Beckmann & Beckmann 2012). Even though there is a power relation where "experts" are considered smarter, and superior than the villagers, the villagers have over the years developed a critical way of looking at the claims of western science to provide the necessary and sufficient 'solution' to problems of development. They mostly stress the importance of understanding knowledge in the particular contexts, whether the knowledge or information provided by the experts will be useful to cope with their present socio-economic scenario or not.

For example, in recent times, as mentioned earlier community based tourism is increasingly becoming popular in the region, as many travels are inclined to travel to "unique", "unexplored" and "untouched" parts of the world to live in the villages and experience local culture, nature and food (Sims, 2009).The reason why the government and organizations are adopting tourism as a good source of revenue generation is because tourism industry also happens to generates employment opportunities in areas that have poor infrastructure. With tourism bringing in revenue, it pushes the state to develop necessary infrastructure like roads, telecom etc. As the Arunachal Pradesh Tourism Policy 2003 emphasised on Citizen Government

partnership, public-private partnership, tourism investment policy, with better marketing strategy, and by promoting eco-tourism or sustainable tourism, from 2004 to 2006 the region has seen a growth of 366.23 million to 462 millions of domestic tourists (INTACH, 2010). Though, the region has also witnessed an increase in revenue generation in terms of foreign exchange from foreign tourist, tourism has not quite benefitted local people. States like Sikkim[32] have been quite successful in incorporating community based tourism as a conservation agenda. But, Mr. Rajendra P Gurung who is the owner of Eco tourism and conservation society of Sikkim gives a good explanation of the present tourism model of the region. Rajendra Gurung is a conservationist and is from a small village in Sikkim. Educated in the western education system and living close to nature, he believes that he learned about conservation from his father. From his childhood, Gurung used to go to the forest with his father to learn about various flora and fauna and methods to conserve this biodiversity. Rooted in this value system, Gurung is trying to bring the new wave of tourism practice in Northeast India through his vision of "eco-tourism". But his primary concern is that the younger generation is not very keen on learning or investing their time and energy in eco-tourism. He thinks they are not close to nature. His initial motivation to start his organization was because he understood that Northeast is disconnected from the rest of the India, and each person has its own perception of the region and some of them are not very good.

> "Since there is lack of development in the region, and whatever little that has evolved here are in pockets the government is trying to come up with plans and incentive to help people of these marginalised states develop through tourism. In some states tourism have

[32]**Sikkim** is a northeastern state of India. It borders China in its north and east, Bhutan in its east, Nepal in its west and the Indian state of West Bengal in its south. Sikkim is also located close to the Siliguri Corridor near Bangladesh. Sikkim is the least populous and second smallest among the Indian states

developed better than the other". He added that "the West Arunachal Pradesh is more disconnected from the plains, as history has isolated different location differently. For example, Sikkim is more accessible and considered more peaceful because of their ethnic harmony between the Lepcha, Bhutiya, and the plains, compared to the other Northeastern states. This is the reason why tourism started to flourish much earlier. However, due to easy access there lies a disadvantage. Since the region was more accessible to rest of the country, many external businesses started to develop their businesses in the region. Even though tourism is generating a lot of revenue for the state government, there are less of local people involved and more outsiders who are running the tourism industry in the region". Gurung adds that "one of the reason why the local people are not benefiting out of this present tourism model is because in Sikkim 90% of the hotels have been leased out to outsiders. Doing business in not in our blood. We are very naïve and cannot compete with the city people. We are also quite corrupted to do business ethically and we are not naturally motivated. So, the government policies have to be right on track to make it work these regions are still neglected by the Delhi government (federal government). Which is why it is important for the local indigenous people to harness to their culture, traditions and heritage and protect it compete against the present tourism market".

Thus, even if many outside businesses approach the people of the Zemithang Valley with new innovative ideas for implementing community-based eco tourism, the villagers are quite hesitant because they are concerned about the negative impacts. For these scenarios outsiders, have learnt how to pitch their proposal to the villagers quite carefully. Loomis says that "anthropological studies of economic development, power and inequality have tended to

concentrate on the role of the state and the reactions of the disadvantaged. The role of the corporation in local politics and economies may be described but precisely how they exercise their power and influence is less explored. Benson and Kirsch (2010) argue for the reorientation for the study of power to focus on "how corporations operate, how they engage with the states and public and how the human health, environment and economy is negotiated". They propose concentrating on strategies that corporations employ to defend themselves to minimise criticisms." However, there is a difference between prior strategies and "standard manoeuvers" Standard Manoeuvres is what Bourdieu (1977) refers to as "spontaneous improvisation" (Loomis, 2016 p. 7).Based on the circumstances or the settings actions and languages get repeated, embellished and perhaps become encoded in an institutional practice because they produce the result channelizing their main objective that they are seeking to achieve. Even if it is not implemented in the true sense, words like "co -management", "awareness programme", "community based eco development" are repeated over and over again to normalise it in the region. For example, the three weeks that I had spent in West Kameng district, I interacted with local village level youth groups who have been trying to implement various actions and "awareness" programmes in the villages with an objective to preserve cultural, environmental and social entity among the Monpas. Per one the local NGO "The community needs to be aware of their assets. We have so many cultural heritages and rich in history, we need to preserve it and protect it." (Personal interview 2016).

International organizations, government, army, local schools and Panchyat collaborate with the local NGOs to strengthen their "awareness" programme. By organizing events in "collaboration" like Clean Air Day, World Environment Day in schools, community halls, every, stakeholders are being able to meet their own small scale agenda. In case of the local

NGOs, they are getting recognition and funds at the local level. For international organization, they are being able to engage with the community and increase social interaction to implement their conservation agenda, for army- they are trying to achieve their welfares agenda among the community, and for government they are enhancing their public image by trying to strengthen their relations with the community. Thus, the concept of "Awareness" with capital A is an ambiguous word. Since every stakeholder has different intentions and objectives to engage community in co-management, the way the community interprets is also quite different. Thus in Arunachal Pradesh with the building of these large dams, marginalization of the community and agitation among the local people and traditional institution anchoring onto the wildlife conservation and protection of their environment, traditional knowledge and culture is the only intention. The environmental crisis, followed by the marginalization of the community along serves a dual purpose. It produces new knowledge and it challenges the power structure. From this it is very clear that the notion of indigenous knowledge and people is very much intertwined with the questions concerning protection of nature or environment and that to in the current discourse of development. In my discussion and conclusion, I provide the overview of the politics of the moral justifications provided by the various stakeholders in the present time. But, I also question that though everyone is achieving their short term goals, it is not fulfilling the long term goal of sustainable development in the region. I step out from the role of being an anthropologist and play the role of an advocate to showcase how ethnographic work can open the road for a new path where stakeholders can work together for a better future.

Chapter 6

Concluding Discussion

"What has not been felt is felt; what has not been touched is touched; what has not been seen is seen; what has receded into the past is being recalled into the present; what has been present is being pushed back into the past; what has not been contended with is contended with; what has been destroyed is being repaired and restored, and what has not existed is being added"- (Smyer, 2015)

In this "new world order" as Sahlins (1993) said "for centuries they (minorities) may have hardly noticed it. But now, as the New Guinean said to the anthropologist, If we didn't have kastom, we would be just like white men's ..... . In my presence he shouted, we must find strength in our customs; we must base ourselves on what the Whites call culture."(Sahlins, 1993 p. 3). What distinguishes the current "culturalism" is the claim to one's own mode of existence as an asset and a political right, which functions in opposition to a foreign-imperial presence. Under the stress of competing with western intellectuals, communities revive themselves to negotiate with the dominant power by inventing tradition or producing new knowledge. Thus, Sahlins says that all traditions are "invented" in and for the purposes of the present. In the present discourse of developmental and environmental change, Arunachal Pradesh happens to be in a similar place where people are "inventing" traditions to cope with change. Like the word Awareness, Culture, Traditional Knowledge, and Community-Based Conservation are on everyone's lips in West Arunachal Pradesh. People are compelled to use these words and phrases as their only assets to survive and claim their presence in the region. I began this thesis

by suggesting that to explain struggles over resources and development projects like dams one has to do so in the context of historical capitalist expansion. Throughout the thesis, over and over again I have tried to highlight the administrative, political, environmental journey of the Monpa people to cope with capitalist expansion into their region, an area where the community is trying to constantly negotiate with regional and outside agencies and organizations by building various defence mechanisms. I will end this thesis going back to that same proposition.

Jean Michaud says that in James Scott's "Zomia", the people of the highland and eastern Southeast Asian Massif, had historically taken ethnic, cultural livelihood, social refuge from the surrounding "civilizations" in order to pursue living in a stateless society (or at least in a space where the state does not control people significantly) is now, this place that has taken a different path. The region which was once known to be "unruly" or complex for governance purposes is no longer present as such. Just as I discussed in Chapter 4, according to Michaud this unruly behaviour of the region is an intentional coping mechanism. But with the arrival of the open market, the region's hydropower expansion, neo-liberal conservation actions, and democratic change, the community needed to be more refined in their resistance strategies against the power of the central. Thus the "reinvention of tradition" is a form of a resistance among the Monpas. Over the years, the Monpas have been absorbed by the capitalist world. Like other families, among the Monpas financial security, government jobs, providing proper education and good standard of living to their family were some of the main concerns of the people in the region. None of these people are remote, untouched or pristine in a true sense. Though due to their religious attachment with the monastery and local needs for *churpi* and *ghee*, they still practice pastoralism, every year the new generation is finding that livelihood option less appealing. Does that mean that the relationship that the community with their surrounding environment is

changing? In this case both yes and no. Yes, the herders have a lot of knowledge and respect regarding the flora and fauna, and grazing land biodiversity, local medicinal plants as well as religious attachment with certain species like the Black Necked Crane, but that attachment is not to intentionally preserve their knowledge, it is rather because they are practicing certain activities and are socially, religiously and environmentally connected with those activities in the present context. This knowledge can take any direction. As more and more people are engaging with external actors their notion of their surrounding nature is also shifting. The quote that I used in the beginning of this chapter explains exactly the same thing. New knowledge gets added, old knowledge is pushed back. Geographer Noel Castree (2003), talks about commodification of nature. According to him capitalist commodification is not only isolated to external nature, like trees, animals, resources; "human nature" can also be commoditised. Commodity is something that can be "exchangeable". In return of committing to safeguard the environment in the new terms of NGOs, the community is gaining perspective of their claim on their land. In the thesis, I have mentioned multiple times how the land is known to be under the control of the community. Such a comparison is generally made with other parts of India which are rich in resources and communities are generally marginalised. But this concept of community ownership is completely misleading. With central administration slowly taking over the region, state leaders, politicians and elites controlling the landscape, conservation organization trying to attain their conservation goals of protecting "The Animal" that it has completely restructured the hill societies and has left communities relatively powerless to only control certain local resource bases. But, approaching the end of writing this thesis, I began to reflect on my anthropological subjectivity with West Arunachal Pradesh and how I am contributing to this place as an ethnographer. There was this time when anthropologists like Verrier Elwin who had worked in the Northeast and in Arunachal

Pradesh used their knowledge and learning to conduct ethnographical research among the hill tribes to help colonial leaders and central government departments build good relations with them. This relationship was built so that the region could come under their control for resource exploitation and territorial and administrative expansion. But, during this time, the role of an anthropologist has changed. I believe we need to use our same knowledge of anthropological practices and ethnographic research to help stakeholders and outsiders to adapt a different path. It got me thinking that many would argue that outsiders can help to empower and educate insiders, leaving them stronger, more self-sufficient and able to actualize their own aspirations. But going back to the beginning of my thesis, where I introduced myself as an ethnographer, a marginalised researcher who had the privilege to take part in this journey to Arunachal Pradesh, in the grand scheme of things, as an outsider no stakeholder including myself can provide that assurance. However, I know that other than producing knowledge, contributing to various anthropological literatures, and looking into the various rhetorics critically, I can, in fact play a role of an advocate. Since I have worked in that region since 2013, over the years I have build a relationship with the people, working groups, and many different stakeholders, and I believe that I have a role to play that will help people reflect upon and improve their coping strategies. I hope that this thesis has highlighted certain intricate complexities of human-animal interactions, resource management and development practices not only in the Himalayas but in other parts of the world. Every day there are new developments that are taking place in the region. I know by the time I have finished this work, the circumstances surrounding dams have already taken a whole new turn. My intention throughout this project was to produce something different. Even during my last days of field work my friends would ask me whether I was documenting the political environmental and social impacts of hydro power development. My answer was always

no. I wanted to place the emphasis not on the impacts but on how various agencies negotiate development and conservation and how this negotiation between actors changes historically. My engagement with the Himalayan landscape, which began in 2013, is coming to a temporary halt as my interests are shifting elsewhere. I started my anthropological studies at the University of Alberta in 2015. It was the same year that the collapse of the Provincial Conservative government (PC) and the coming of the new progressive NDP triggered certain changes in the region. The NDP government embarked upon many policy level changes, among which was the climate change policy that brought increased carbon taxation, and impacted the socioeconomic scenario of the province. I believe, I am in the right place at the right time to conduct this study. Alberta, and the larger region of Northeastern Canada, today is known and represented as many things, frequently as an industrial frontier for its rich deposits of oil and gas (Alberta Energy 2012), its mountain landscapes and other diverse regions (Achuff, 1994), and a homeland for a number of indigenous peoples (Parlee 2015, p. 425-436). Despite its strength, it also happens to be one of the western Prairie Provinces that is facing an increasing concern for its crisis over the inadequate availability of fresh water (Schindler and Donahue, 2006, p. 7210-7216). Like Arunachal Pradesh, water is not only imagined as a resource for agricultural activities and a lifeline for many communities, but is also an important commodity for the large industrial projects of the Alberta's oil sands. Serious concerns about the sustainability and usage of Alberta's surface and groundwater supplies have brought together stakeholders to mitigate this complex problem. With the growing need for government, industry, scientists, indigenous communities and NGOs to attain social equality and environmental sustainability, networks of stakeholders are constantly interacting with each other to contour plans and policies to improve water quality, achieve environmental and social justice, without hindering economic

growth and industrial development. With the critical similarities with the Himalayan landscape, I aim to start my new journey to understand how different actors with different power relations deploy narratives of change, and how democratic decision-making institutions deal with the scientifically, ethically and politically complex questions posed by the issues related to water governance in Alberta. My journey as an ethnographer has just begun—there is a long way to go where we can step up and use this knowledge and experience in practice.

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Appendices:

Informed Consent Form I:

To Whom It May Concern:

RE: Letter of information and invitation to participate in a research project:

My name is Titash Choudhury and I am graduate student in the Anthropology department at University of Alberta, Canada. I am engaged in a research project as part of the requirements for my Master of Arts degree. The objective of my project is to understand the human environmental relationship among the Monpa pastoral community of Arunachal Pradesh. I would like to understand that in the present context of climate change, globalization and modernization, how it is impacting the daily socio-economic lives of the people. To conduct this research, I am interested to talk to people in person or as a group, so I am inviting you to participate in my research project, and to allow me to interview you.

The interview session would be for approximately one hour at a place and time that is mutually agreeable to both of us. I will audiotape and take pictures of our discussion (if required), and transcribe the information myself. You can decline from answering any questions, and you can withdraw from the interview at any time or decline being taped or photographed. Should you choose to withdraw early, you can decide whether or not I can use the information you have provided to that point. The anticipated benefit of the study is a contribution to our knowledge of how and why Monpas of Tawang understands change around them and respond to risks and uncertainties. The project poses more than minimal risk to participants since the questions address attitude and personal opinions and mainly for academic purpose.

As you are a resident of Tawang district, this research will also maintain participant's anonymity with regard to sensitive issues like building of hydro-power projects, climate change, environmental degradation etc. However, your comments will be identified in the thesis, and it will not be represented or generalised as "Monpa's" or any other organization's or actor's perceptions. However, because of the nature of having limited number of development projects and since actors are sometimes identifiable by their comments about their industry, objective and views, the researcher cannot offer participants a guarantee of anonymity and you should be aware that it is still possible that someone who knows of you may be able to recognize you, in the comments you make. I will provide participants with a soft copy of the completed thesis upon request. I will store the data securely and will keep all information indefinitely in the event I continue research on this topic. Should I continue my research I will acquire your reconsent to use the data in new ways. If the study is discontinued, I will destroy the data.

My supervisor is Professor Mark Nuttall. His email address is mnuttall@ualberta.ca. Please feel free to contact him if you have any questions about the project or about me. This research project has been reviewed and received ethics clearance from the University of Alberta Ethics Committee. Should you have any questions or concerns about the ethical nature of this project, or your involvement, you may contact the Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, you can also contact the Research Ethics

Office at (780) 492-2615 or reoffice@ualberta.ca. For doubts regarding the researcher and her academic work you can contact the Department of Anthropology at the University of Alberta directly to their email address is anthrograd@ualberta.ca. Or, by telephone and email me, at +91-7802320072 (Canada) or 9830020646 (India) and at titash@ualberta.ca respectively. Voluntary Participation and Withdrawal of Consent:

You are under no obligation to participate in this research study. You are free to withdraw from the interviewing process during my time spend in the Arunachal Pradesh. You will not suffer any disadvantage or reprisal for withdrawing. However, since the data will be collected under anonymous naming, withdrawal cannot occur once the data collection is completed. But under certain circumstances, if you need to withdraw the data, or modify it, you can contact the researcher, via email, phone and provide the reason for the withdrawal or modification of the data. You will be given, in a timely manner throughout the course of the research project, information that is relevant to your decision to continue or withdraw from participation

CONSENT

I, _____ have read the letter above, have asked any questions about the project and have received satisfactory answers to my concerns, and voluntarily agree to participate in the study.

_____ _____

Signature of participant Date

Print Name Sing of Investigator

Informed Consent Form II:

To Whom It May Concern:

RE: Letter of information and invitation to participate in a research project:

My name is Titash Choudhury and I am graduate student in the Anthropology department at University of Alberta, Canada. I am engaged in a research project as part of the requirements for my Master of Arts degree. The objective of my project is to understand the human environmental relationship among the Monpa pastoral community of Arunachal Pradesh. I would like to understand that in the present context of climate change, globalization and modernization, how it is impacting the daily socio-economic lives of the people. To conduct this research, I am interested to talk to people in person or as a group, so I am inviting you to participate in my research project, and to allow me to interview you.

The interview session would be for approximately one hour at a place and time that is mutually agreeable to both of us. I will audiotape and take pictures of our discussion (if required), and transcribe the information myself. You can decline from answering any questions, and you can withdraw from the interview at any time or decline being taped or photographed. Should you choose to withdraw early, you can decide whether or not I can use the information you have provided to that point. The anticipated benefit of the study is a contribution to our knowledge of how and why Monpas of Tawang understands change around them and respond to risks and uncertainties. The project poses more than minimal risk to participants since the questions address attitude and personal opinions and mainly for academic purpose.

As you are a practitioner/academic, working closely with the community in the present discourse of Climate, environmental, developmental and socio-economic changes, your participation in this research will be of a great help. However, this research will also maintain participant's anonymity with regard to sensitive issues like building of hydro-power projects, climate change, environmental degradation etc. However, your comments will be identified in the thesis, and it will not be represented or generalised as "Monpa's" or any other organization's or actor's perceptions. However, because of the nature of having limited number of development projects

and since actors are sometimes identifiable by their comments about their industry, objective and views, the researcher cannot offer participants a guarantee of anonymity and you should be aware that it is still possible that someone who knows of you may be able to recognize you, in the comments you make. I will provide participants with a soft copy of the completed thesis upon request. I will store the data securely and will keep all information indefinitely in the event I continue research on this topic. According to the University of Alberta policy, I have to keep the data for minimum of five years after completion of my study. Should I continue my research I will acquire your reconsent to use the data in new ways. If the study is discontinued, I will destroy the data.

I am Titash Choudhury is the Principle Investigator of the study. You can contact me via telephone and email me, at +917802320072 (Canada) or +91432062788 (India) and at titash@ualberta.ca respectively.

My supervisor is Professor Mark Nuttall. His email address is mnuttall@ualberta.ca. Please feel free to contact him if you have any questions about the project or about me. The plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615 or reoffice@ualberta.ca.

Voluntary Participation and Withdrawal of Consent:

I volunteer to participate in a research project conducted by Titash Choudhury from the University of Alberta. My participation in this project is voluntary. I may withdraw and discontinue participation at any time without penalty. If I decline to participate or withdraw from the study, no one will be told. I understand that most interviewees will find the discussion interesting and engaging. If, however, I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview. Notes will be written during the interview. An audio tape of the interview and subsequent dialogue will be made. If I don't want to be taped, I have every right to decline it.

I also understand that the researcher will not identify me by name in any reports using information obtained from this interview if that is my request. Also, my confidentiality as a participant in this study will remain secure. I acknowledge that I have a choice as to whether I

want my name used to identify my contributions, with possible limitations upon my request. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions.

I understand that after the first draft of Titash Choudhury's thesis has been released and one round of amendments, comments, suggestions, and requests have been solicited; I cannot withdraw myself from the study or make any other requests regarding my participation. Up until that point, I acknowledge that Titash Choudhury will openly accept my right to withdraw from the study.

CONSENT

I, _____ have read the letter above, have asked any questions about the project and have received satisfactory answers to my concerns, and voluntarily agree to participate in the study. I have also been given a copy of this consent form.

_____ _____

Signature of participant Date

_____ _____

Printed Name of Participant Signature of the Investigator