Local Communities and Wildlife Conservation: Stories from Northeast India

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GLOSSARY

Participation: It refers to the involvement of people at various degrees in a project.

Wildlife conservation: It refers to the techniques and regulations used for preservation and sustainable use of wild flora and fauna.

Community: It is a group of people sharing some common norms and living in a particular geographical unit. A community can be both homogenous and heterogeneous.

Community-based conservation: It refers to the integration of local community needs at various levels into wildlife conservation.

Ethnography: It is a systematic qualitative documentation of human society and culture, mostly through observation.

Semi-structured interview: An interview technique deployed with a pre-determined set of open questions and with flexible process for the interviewer to further probe into the responses.

Key-informant interview: It is a qualitative in-depth interview with people who have deep knowledge about a certain situation.

Purposive sampling: It is non-probability sampling technique where the sample is chosen based on certain characteristics of the population and objective of the study.

Snowball sampling: It is a non-probability sampling technique where the respondents of the study choose future respondents among their acquaintances.

Northeast India: It comprises of seven states, namely Assam, Meghalaya, Manipur, Nagaland, Mizoram, Tripura and Arunachal Pradesh.

CHAPTER 1: INTRODUCTION

There has been a remarkable change in the practice and idea of nature conservation globally. From being protectionist and non-exclusive, conservation projects are now becoming more inclusive, and have been reaching out to the indigenous people, who were ignored and marginalized for a long period of time. While the outcome of community-based conservation projects is said to empower local communities, some see this as a coercive way of diffusing ideas by global partners such as funding agencies, and international NGOs as a way of controlling the local resources. Community-based projects are also a part of a larger process in which multiple actors, institutions and discourses define, contest, re-interpret and enforce ideas and claims over nature, making it a complex socio-political process. This project aims to understand the types of conflicts and contestations over the ideas of nature.

The study aims to analyze different models of conservation projects that are currently operational in the Northeast India and to suggest effective models that would benefit local communities and biodiversity. This study was supported by Social Science Research Council (SSRC) Transregional Research Junior Scholar Fellowship, with funds provided by the Andrew W. Mellon Foundation. Primarily, this project aims to analyze community based conservation initiatives in terms of local community's perception and attitude towards the conservation projects and different actors involved in these projects such as government agencies (forest department), NGOs (grassroots, transnational) and individual researchers. The project also aims to understand the human-local wildlife interactions and how they have been affected by these conservation projects over time. Three sites in Northeast India were chosen (Arunachal Pradesh, Assam and Nagaland).

Conceptual Framework

The central analytical unit of this study is community-based wildlife conservation projects which involve protection of certain key wildlife species. The four prominent human actors within this context are the local communities, government agencies such as Forest Departments, Fisheries Departments among others, non-governmental organizations and individuals or team of researchers. These actors and focal wildlife species as non-human actors interact among themselves at various scales. Keeping the local community at the centre of these interaction networks, we, in this project aim to understand

- 1) local community-external actor's interaction.
- 2) local community-focal wildlife species interaction.
- 3) levels of participation, and engagement of local community in these projects.

The schematic diagram shown in Fig 1 presents the conceptual framework.

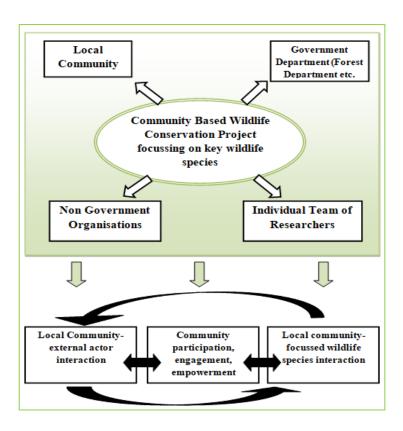


Figure 1: Conceptual Framework of the research

Research questions

There are three key objectives of this project:

1) To understand conservation practitioners' perceptions about community-based conservation

Community Based Conservation (CBC) has been seen as a panacea for wildlife conservation. Available literature shows existence of a wide variety of models of CBC depending upon the overall objectives, levels of community engagement, geographical area of the project and involvement of different agencies. While efficacy of all these models is hotly debated, there is an overall agreement that none of these models are fully efficient and sustainable because of multiple reasons. The present project aims to understand conservation practitioners' perceptions about Community Based Conservation via the following research questions:

• What are the characteristics of community participation in these projects at different phases?

• What are conservation practitioners' perceptions about community empowerment in these CBC projects?

2) To understand community participation and community-external actor interactions in selected study sites

Case study approach was undertaken by selecting three study sites in the North Eastern states of India. In each of these sites, community-based conservation was studied to understand community participation in the projects. Different actors associated with these projects were identified and their interactions with the local community were documented. The main research questions were as follows:

- How and why do communities decide to participate in a CBC project?
- Who are the different actors involved in a CBC project?
- What are communities' perceptions about the various actors in the CBC project?

3) To understand the impact of CBC projects on community-focused species interaction

The study sites were selected keeping in mind that the conservation projects aim to protect a wildlife species. The aim was to understand how these species-focused wildlife conservation projects affect local community-wildlife interaction. Literature indicates positive as well as negative attitude, and even no change of attitude within local community towards the focal species after the project intervention. The main research questions are as follows:

- How do communities perceive the species under focus and how do different groups within the community perceive the focused species?
- How do external actors integrate community-focused species interaction into CBC projects?

CHAPTER 2: LITERATURE REVIEW

'Community-based Conservation' has become a buzzword among global wildlife conservation groups where integration of local communities at different scales in conservation have been given a thrust over strictly protected-area based conservation. Kellert et al. (2000) found five characteristics of community-based natural resource management:

- (1) A commitment to involve local community and institutions in management of natural resources.
- (2) An interest to devolve power and authority from centralised systems to local systems.
- (3) A desire to link objectives of socio-economic development and environmental conservation.
- (4) A tendency to legitimize indigenous resource rights.
- (5) A desire to include traditional values and knowledge into modern resource management.

While deconstructing the concept, we can separately question the three terms, i.e. 'community', 'based' and 'conservation', as there is no standard definition of these terms. The word 'community' is a contested term (Agrawal & Gibson, 1999). What is a community and who decides who all will be involved? Which community will be considered and who will be left out? The word 'based' holds different meanings. Does it mean 'included' (i.e. only passive participation) or, 'linked' (i.e. moral obligation) or, 'centred' (i.e. social justice) or, 'induced' (i.e. encouraged/facilitated) or, 'managed' (i.e. enhanced capability) or, 'led' (i.e. autonomous)? The term 'conservation' has been greatly debated and has raised the question 'conservation of what'? Should species or habitats that are more important to local communities be conserved or should species and habitats important to external communities be conserved? Do these different interests converge? Why and how to converge them? Is such a trade-off of importance necessary?

There are no straightforward answers to these questions. They vary with context and frame of reference. We will try to broaden these terms in subsequent sections.

Emergence of Community-Based Conservation

Conservation of wildlife in India and other developing countries has long followed the 'Fortress conservation' (Brockington, 2002), i.e. an exclusionary paradigm with carving out inviolate protected areas (PAs) aided with policies and laws. The local communities faced physical, economic and cultural dispossession. This questioned the effectiveness of excluding human activities in conservation projects. It

became undeniable that local communities, often impoverished, faced a huge cost of living with marginal, tangible benefits. While it may be argued that benefits of protecting forest and wildlife involve maintenance of ecosystem services but alternate livelihood opportunities' costs, involve displacement (loss of shelter, asset or livelihood), restricted access to resources, human-wildlife conflict and degradation of resources which impact the local communities far more from the benefits (Coad et al., 2008; Brockington, 2002). Over the years, there is an increased engagement with local communities to conserve wildlife and natural resources. There are two principal reasons to engage communities: firstly, inconvenience in realizing goals of conservation and secondly, injustice caused by conservation.

'Inconvenient' Conservation

Conservation is not easy, as community's negative attitudes and resistance towards conservation is seen as a major hurdle in fulfilling the objectives of conservation, largely due to social costs involved. Certain forms of conservation can be 'inconvenient' for both, the local communities and implementers of the conservation projects.

For effective conservation practices, local communities pay a cost. They are required to either give up their claims on the resources or sometimes are expected to cooperate with the state policies which are often against the needs of the local communities. Empirical studies in South Asia corroborate such a view where although communities perceive natural resources and ecosystem services positively, there is often a negative and a non-cooperative approach towards the state initiated conservation projects. Mehta and Heinen (2001) studied community's perception in community-based conservation areas in Nepal. They found that unlike the attitude of people towards state-owned wildlife reserves, community in their study area were more positive towards the conservation area, because of community development and community forestry programmes. They concluded that local people's support for protected area depends mainly on differential perceptions of costs and benefits of living around protected area. Sekher (2001) studied participatory resource management practices in India and found that traditional management regime scored better in participation over NGO-administered and state-driven governance regimes. In traditional regime, the rules were found to be embedded in local customs, more number of user groups participated in discussions and the locals enjoyed greater autonomy. Similarly, Lepp and Holland (2006) found that the local community posed negative attitude towards protected area due to non-participation, apathy of officials, limited knowledge of local management system, uncompensated losses and perceived corruption and nontransparency in state-led conservation projects in Uganda. While, the overall approach was negative towards such initiatives, people were positive towards community-based conservation due to incorporation of traditional values into management, greater participation, benefits from tourism, compensation to losses and

transparent management and knowledge. Restricted access to natural resources combined with other factors give rise to conflict between local people and state authorities. Rastogi et al. (2014) showed that perception of impact and social legitimacy among other factors, affected the threshold of public pressure and therefore local community mobilized themselves against the state authority to take cognizance of their problem. In response, the authority had to devote significant amount of time and funds to resolve the conflicts. Robbins et al. (2009) found non-compliance with conservation restrictions and illegal forest resource usage as deeply institutionalised where local community and frontline staff interacted daily. He called this phenomenon as 'conservation as it is' providing its generic nature across PAs.

'Unjust' Conservation

According to Brockington (2003) the 'principle of local support' is to realize that conservation goals are overrated. Power asymmetries within conservation weaken the resistance of the local communities resulting in 'unjust' conservation. According to him, conservationists should acknowledge this and 'injustice' should be the core of reforms in conservation value and not the 'inconvenience'. The power structures in conservation have often not recognized indigenous community's knowledge and their practices and have overlooked the violent means by which these communities were displaced (Peluso, 1993; Brockington, 2002; Brockington & Igoe, 2006; Kabra, 2009). Reformation of conservation approach is necessary to provide space for decision making by the local communities such that they are aware of the costs and benefits of conservation (Brockington, 2004). This school of thought is particularly critical of the state-corporate nexus in conservation which has appropriated the conservation rhetoric into their neo-liberal development agenda and has termed it as 'Neo-liberal Environmentality' (Fletcher, 2010).

Policy and pragmatic challenges for community-based conservation are many. Lele et al. (2010) pointed out that institutional arrangements may become complex, both horizontally and vertically due to the actions by various interested groups and hierarchical nested groups respectively. Conservation as a social process needs to be locally acceptable and adaptive or else externally aided conservation may lead to epistemological clash between 'insider' and 'outsider' (Pimbert & Pretty, 1997; Bawa, 2004; Lele et al., 2010). Pressurised by funding organisations, conservation NGOs who are, sometimes inexperienced in rural development projects tend to oversimplify socio-economic issues (Campbell & Vainio-Matilla, 2003). Heterogeneity within the community, limited degree of participation, tenurial insecurity, and fuzzy linkage between livelihood activities and conservation goals hamper the realisation of desired objectives (Agrawal & Gibson, 1999; Hughes & Flintan, 2001). Most of the wildlife conservation projects are largely implemented and managed by biologists, with little or no training in social sciences. Conservation workers often have limited appreciation of the local people's concept of nature-conservation or even local ways of conservation

(Aiyadurai, 2016). Pimbert and Pretty (1997) asserted that existing conservation institutions and professionals need to shift from being project implementers to new roles which facilitate local people's analysis, planning and action. The process of conservation should lead to local institution building, or strengthening, and so enhancing the capacity of the people to take action on their own. This implies the adoption of a learning process approach in conservation, democratization of the process, adopting new concepts, values, participatory methodologies and behaviour (Lele & Menon, 2014).

Community-based conservation models in India

Rodgers et al. (2003) identified four broad models of community approaches to conservation (Table 1). He shows that in India, community-based conservation is different from Africa, as PAs in India are smaller with higher densities of forest dependent people with negligible income from tourism, which makes benefit sharing difficult.

Table 1 Typologies of community-based conservation

Community-based Natural	No explicit linkage to PA, medium-high participation, equal weight placed on
Resource Management	conservation and development
Community-based Conservation	Explicit linkage to PA, low-high participation depending on responsibility and authority vested on community, conservation focused on contribution to development
Community Conservation	Explicit linkage to adjacent to PA, benefit sharing model, involvement of local community to aid conservation and improve community relations
Community Involvement	Recognition of usufruct rights inside PA, involvement of local community to aid conservation and improve community relations

According to Krishnan et al. (2012), biodiversity governance in India has two streams: state-driven conservation and community-based conservation. The state-driven conservation consists of administration of the protected areas as per the Wildlife (Protection) Act, 1972 and territorial forests as per Indian Forest Act, 1927. The community-based conservation takes place in various forms. Autonomous community efforts are regulated according to customary laws. Co-management is a form where the state and community jointly make rules and appropriate the natural resources. There are various decentralised governance institutions where the state has devolved its power to constitutional or statutory local bodies. Community involvement in

conservation in India has evolved over time in policy and practice. Joint Forest Management (JFM) and Ecodevelopment (ED) projects were initiated to integrate community needs in conservation in territorial forests and PA respectively. The underlying assumptions are that if local livelihood options can be diversified, it will reduce human pressure on biodiversity and that the most important threat to biodiversity resources are the local people and their livelihood practices. Therefore, an integrated conservation and development approach would provide sustainable alternatives to traditional protectionist approaches of conservation (Hughes and Flintan, 2001). The strategies involve community participation with various degrees of planning, implementation, building institutions along with providing livelihood and capability building training (Lele et al., 2010). JFM and ED both have been criticised as 'recentralizing while decentralizing' top-down mechanisms adopting a paternalistic attitude towards local community as passive beneficiaries rather than equal partners, paying lip-service to rhetoric of 'participatory management', undermining their knowledge and rights to govern natural resources and furthering dispossession of marginalised groups (Lele, 2000; Baviskar, 2003, Ribot et al., 2006). ED projects have failed to develop adequate monitoring and evaluation systems to rationalise the linkage between development and conservation (Hughes & Flintan, 2001). Thus, these projects initially provided conservation benefits around Indian PAs (Mishra et al., 2009) but could not address the attitude of the local people and the local issues in the long run (Arjunan et al., 2006; Macura et al., 2011).

Decentralized institutions for governing natural resources such as Panchayati Raj Institutions, Gram Sabha and Van Panchayat resulted in greater community participation with improved livelihood options, but their implication on sustaining wildlife became questionable (Krishnan et al., 2012). Autonomous community efforts to protect wildlife and habitat through delineating community conserved areas, as per customary laws has long been held as panacea (Pathak, 2009). Such panacea is also critiqued for overemphasising the issues of development and oversimplifying ecological impacts (Bajracharya et al., 2005; Shrestha et al., 2010). Shahabuddin and Rao (2010) compared biological diversity between community-conserved areas and protected areas and found that habitats under community management harbour different species assemblage. Endemic, specialized and habitat-sensitive species were less abundant at community conserved areas as these areas were found to be smaller, fragmented and more affected by agricultural expansion, resource extraction and community's preference over particular species.

CHAPTER 4: FIELDWORK

The study is exploratory and descriptive in nature. It offers an extensive description of how local communities, external actors and focused species interact with each other in the context of community-based wildlife conservation projects. The first part of this section discusses the methodology, specifically about the tools used for data collection. The second part discusses the fieldwork experience and challenges. The third part deals with the ethical dimensions of the study.

Methodology

The production of knowledge on community participation in environmental conservation projects have been affected by specificity of disciplinary training of researchers. Wildlife conservation is no exception. Primarily conservation biologists dominated the arena when nature protection as a component of future sustainability evolved. The emergence of participatory development paradigm has infused the engagement of development practitioners and academicians into this field. While, conservationists have begun to argue for greater community participation in wildlife conservation, the perceived division of natural science and social science in terms of methodology have produced different worldviews on the efficacy of engagement of the local community.

The present study adopted a grounded theory approach from a constructivist worldview to understand community conservation in India. Through the narratives of project experience of different actors involved, theorization was carried out during the field work and during the analysis of the observations. To achieve the first objective, mixed methodology seemed appropriate. Integration of qualitative and quantitative methodologies reinforced each other to understand issue more comprehensively, through primary as well as secondary data. Secondary data was collected from peer reviewed journals and semi-academic sources on various themes to form the context of the study.

Collection of primary data involved an online survey of pre-defined respondent categories, since the survey involved gathering of information about a large number of people by collecting information from a few of them (Black & Champion, 1976). We chose wildlife conservation practitioners as our respondents because of their experience of working on CBC projects. A questionnaire having open as well as closed ended questions was created for the respondents. Respondents were selected through purposive sampling. Conservation practitioners, both independent and part of an organization were identified and the survey form was sent to them. The online survey was created using Google Form, that provided user friendly interface, an attractive background template and opportunity to structure various kinds of questions (short paragraph, long

paragraph, multiple choice, checkboxes, multiple grids etc.). The form was sent to multiple respondents at the same time, without respondents getting to know who the other respondents were.

To achieve the second and third objectives, case study based qualitative research design was selected. Since qualitative approach provides the 'meanings, concepts, definitions, characteristics, metaphors, symbols and description of things' (Dabbs, 1982), this method was suitable for in-depth understanding of conservation projects. Similar to the first objective, the primary and secondary sources were used for data collection (peer-reviewed journals, semi-academic sources, popular articles, Government records and NGO reports).

Selection of study sites was done purposively, keeping certain criteria in mind. Primary data collection at these sites employed a case study design. According to Ahuja (2001), case study is studying the phenomenon, event, situation or development through a thorough and detailed analysis. A case may be an individual or a group or a community or any unit of social life and for this project we selected local community embedded in CBC projects as the case. Keeping local community at the centre of our study, other actors within the CBC project were identified and their relation with the community was explored. Fieldwork was carried out from December, 2017 to February, 2018 at three pre-selected field sites: (1) human-elephant conflict mitigation project in Goalpara, Assam, (2) bird-based ecotourism in and around Eaglenest WLS, Arunachal Pradesh and, (3) Amur Falcon conservation project in Pangti, Nagaland.

Local community's perception about external actors and the focal wild species were documented through semi-structured, in-depth interviews of community members and key informant interview of specific actors. Although semi-structured interviews did not involve strict interview schedule, some focused on openended questions were asked by probing, direct and indirect questions (Bryman, 2012: 471). Such approach was chosen as it was flexible and emphasis was laid to see how interviewees framed their responses, thus making the interviewer to listen more than talking. Key informant interviews provided descriptive as well as critical understanding of social setting, events and individuals in the context of CBC projects.

A total of 32 semi-structured interviews with members from local community and 9 key informant interviews were carried out across three sites. In Goalpara, 4 villages were selected by purposive sampling where significant NGO intervention had taken place. In other two field sites, the study was limited to one focal village. These actors were chosen through a mix of purposive (ibid: 418) and snowball sampling (ibid: 424). Snowball sampling involved the respondents from the local community proposing other potential respondents for the interview process, thus we were able to get a sense of network of people with similar

experiences. The snowball sampling also reduced the sampling bias since the local community members themselves identified the people with similar experiences.

Significant challenges were also faced in the field. Since it was a closed setting, for successful participant observation and in depth interviewing, the researcher needed to gain significant trust among the respondents. Thus gatekeeper's identification and researcher's honest attitude about the project objectives came into play. Since multiple study sites were selected with limited time schedule, full-fledged ethnographic enquiry was not possible which should have been an ideal approach. Thus, our approach was micro-ethnographic (ibid: 433) in nature which involved lesser immersion of the researcher into field setting but production of data relevant for the project.

Research Ethics

Following Bryman (2012: 135), ethical consideration in this research were four fold:

- 1) There was no harm (physical, mental or otherwise) to the respondents.
- 2) Informed consent was taken.
- 3) There was no breach of privacy.
- 4) No deception was involved.

The respondents were pre-informed about the purpose of the interview or observation. Respondents were briefed about the research topic and consent was taken in verbatim before collection of data. The responses were audio recorded using a voice recorder with the prior consent from the respondent. The respondents were given an opportunity to ask questions about their participation. They were under no obligations to take part in the study, and they could withdraw their consent to participate in the project in case of any risk, discomfort and inconvenience. No respondent disagreed to take part in the interview and no uncomfortable situations arose. Respondents had the right to request access to their interview recordings and transcripts. Strict confidentiality and anonymity were maintained for all the responses. All the data were stored in digital format in password protected personal workspaces of the researchers.

Study Sites

Given the objectives of the study, selection of the study sites (Fig 2) was based on the following criteria:

1) Significant community involvement in conservation of wildlife and habitat

- 2) Presence of multiple actors associated with the CBC project
- 3) Focus on conservation of key wildlife species

Keeping these criteria in mind, several projects were selected on the basis of available literature, professional network and analysis of websites of conservation organizations. We found out the following sites (Table 2) that fulfilled the above mentioned the criteria. Criteria based three field sites were (1) human-elephant conflict mitigation project in Goalpara, Assam, (2) bird-based ecotourism in and around Eaglenest WLS, Arunachal Pradesh and, (3) Amur falcon conservation project in Pangti, Nagaland.

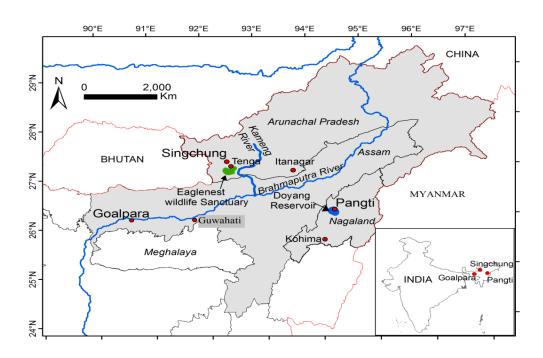


Figure 2 Study Sites (Goalpara, Singchung and Pangti)

Table 2 Study sites in Northeast India

No	State	District	Villages	Project	Intervention
1.	Assam	Goalpara	Nichinta, Kalyanpur and Bengkanada	Elephant conservation project (Assam Hathi Project)	To reduce human–elephant conflicts through community–based interventions and to monitor elephant movements.
2.	Arunachal Pradesh	West Kameng	Singchung	Bird–based ecotourism and Community Reserve	To inculcate conservation ethos among the locals and also provide livelihood options to the local people using bird-based tourism
3.	Nagaland	Wokha	Pangti	Amur Falcon Conservation Project	To reduce hunting of Amur Falcons

Elephant Conservation in Assam

Human–elephant conflict in Gaolpara district of Assam is a serious issue. From 2006–2008, 1.24 km² of crop area worth 14,364 GBP and 362 number of properties worth 14,973 GBP was damaged and 7 people were killed (Wilson et al., 2015). The area has a mixed population of Assamese and Bengali community and tribal Garo and Rabha community. The landscape is a mosaic of villages, farmlands, rubber plantations, Sal (*Shorea robusta*) dominated reserve forests and wetlands (locally called *beel*). Historically, elephants were absent from this area, but according to the respondents, herds started entering from Garo hills from the neighbouring state of Meghalaya from 1993.

Assam Hathi¹ Project (AHP) was initiated in 2003–04 by two collaborating conservation agencies; one regional and another international². The project activities mainly aimed at building crop damage protection measures to reduce frequency of damage from elephants, and to promote sustainable livelihoods

¹ Hathi in Assamese and Hindi mean elephant.

² Chester Zoo-North of England Zoological Society, London and Ecosystems-India, Guwahati. later this project received grant under Darwin Initiative in 2007.

through supplementary incomes (AHP, 2016). The regional NGO consulted with local community, village elders, administration, and forest department. For the mitigation strategies, low-tech and low-cost techniques such as spotlights, chilli-based deterrents were deployed and solar fencing was erected. For the fencing, materials were allocated by the project but its construction and maintenance were carried out entirely by the communities. Such community involvement was solicited so that people do not get an impression that fencing was a free gift. Some funds were raised from participating households for future maintenance. Village committees were constituted for fence protection and to engage households on rotational basis. The fencing was however not a barrier for elephants' movements as it protected only the homestead and not the crop fields. Among these, spotlights and solar fencing were preferred due to their perceived effectiveness against elephants.

Bird-based tourism in Arunachal Pradesh

Forests surrounding Eaglenest Wildlife Sanctuary in West Kameng district of Arunachal Pradesh came into prominence in the world of conservation when a tiny colourful bird was first described from this place in 2006. The bird was named Bugun Liocichla (*Liocichla bugunoram*) after the local tribe, Bugun in order to convey their efforts to conserve biodiversity. Singchung village near the sanctuary where the study was conducted is inhabited by local Bugun tribe³. The discovery of this bird created a stir in the bird—watching community and it became a mascot for bird—based tourism in the following years. With the help of an eminent bird—watcher and conservationist, a local Bugun leader started the 'high—value knowledge—based niche' eco—tourism programme which is running successfully with increasingly more domestic and foreign birders arriving at this place. From the outside, it may seem that Buguns were employed in this business, but most of the staff were from other communities such as Nepali and Monpa and many were from different parts of the state.

The 'real' community involvement in conservation started when Buguns earmarked 17 km² of their community land as Community Reserve (under Wildlife Protection Act, 1972) in 2017 and named it Singchung Bugun Community Reserve (SBCR). The process was facilitated and negotiated by the present Divisional Forest Officer and the researchers working in the area. In 2018, the Singchung Bugun Community Reserve was conferred with prestigious India Biodiversity Award for institution—based biodiversity conservation.

³ Buguns are Buddhist and their major occupations are daily wage labour, farming and livestock rearing. The village is also inhabited by migrant Nepalis who do not have land entitlement but are living for long.

Amur Falcon Conservation in Nagaland

The widely known Amur falcon conservation project unfolded in Pangti village in Wokha district of Nagaland⁴ since 2012. Amur falcon (*Falco amurensis*) is a migratory raptor, which roosts in Pangti in large numbers every year (October– November) during their 4000 km trans–equatorial migration (Bildstein, 2006). A sensational documentary prepared by a conservation advocacy group on falcon hunting was broadcasted in 2012 which documented hunting these falcons. The graphic images drew attention from the conservation community and the stories were reported in leading ornithology magazines, online and print media (Fischer, 2012; The Siberian Times, 2012). Amidst national and international outcry, Nagaland State Government came under pressure and Wokha District Administration and Nagaland Forest Department implemented the 'No–hunting' order asking the village councils⁵ to take immediate action otherwise their development assistance would be curtailed.

The community-led Amur Falcon Roosting Area Union (AFRAU) was set up to keep a check on the birds and the members patrolled the area during the season. In 2016, a monolith was unveiled near the Amur Falcon roosting site to commemorate the Amur Falcon movement in Pangti. Presently, the conservation story is deemed as successful as zero-hunting of falcons has been recorded since 2013. Pangti village council has been conferred with many regional and national awards for successful conservation.

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⁴ Pangti is the largest village for the Indigenous Lotha tribe (one of the 16 major tribes in Nagaland). Lothas are Christians and their main livelihood is shifting cultivation and fishing.

⁵ Village councils in Nagaland are empowered under special provision in Indian constitution to administer development and frame rules in the concerned villages

CHAPTER 5: Factors Influencing Local Community Participation in Wildlife Conservation Projects⁶

Abstract

Participation by local communities in wildlife conservation projects have long been advocated, since it is socially just and is effective to reach conservation and development goals. Socio–economic variables that drive participation and impact of participation have been studied, but the contextual process that stir up local community participation remains understudied. In this paper, we studied the factors facilitating community participation in three wildlife conservation projects in Northeast India. Through ethnographic fieldwork at these sites we identified conservation actors and examined interactions between them.

We found common modes of participation at these sites, and these were related to gaining material incentives, providing labour, attending consultative workshops. Levels of interaction and coercion were found to be different in three sites. Three critical factors that drive participation were: (1) trigger, (2) negotiation and (3) sustenance. Trigger factors facilitate in kick-starting participation through establishment of a crisis narrative and facilitation by external actors. Negotiation factors emerge from day—to—day interaction between local community and external actors and involve effective entry stage activities, income opportunity, mediating voices within the community and intra—community dynamics. Sustenance factors affect the long term participation by community and needs to examine tangible/intangible results, welfare of of locals and availability of funds.

In this paper we argue that investment of time and fund to understand the stakeholders and their concept of participation, periodic feedback sessions, capacity development of locals for self-mobilization, innovative information dissemination, and long term funding are necessary for effective local community participation.

Introduction

Participation of citizens in development studies has long been researched and debated. People's participation is seen as democratic, and people's views and engagement in projects are considered crucial for

⁶ Submitted to:- Biological Conservation, Authors: Sayan Banerjee, Ambika Aiyadurai

its success. Active participation of citizens was sought in 'alternative development' paradigms⁷ but the concept became malleable enough to signify almost anything that involved people's engagement at any level and degree (Cornwall, 2008). Participation as product and process was first described by Arnstein (1969) as 'a ladder of citizen participation' where participation and empowerment were seen as a continuum, from passive participation or non–participation at the bottom, to active engagement or citizens obtaining 'full managerial power' at the top. Such approach assumes that full participation of local people is preferred since it is more transformative for the community. Pretty (1995) on a similar normative tone provided the practitioners' perspective. Representation of communities, therefore became just another stakeholder in the project without giving them the power of decision–making. This was termed as 'manipulative', 'passive' and 'consultative' participation, followed by functional participation where communities provide time and labour to mobilize themselves and thereby control every decision. Other classifications include 'communication', 'consultation' and 'participation' on the basis of the information flow between actors (Rowe and Frewer, 2000). Based on the objectives of the project, Michener (1998) suggested planner–centred versus peoplecentred participation. However, apparent distinctive boundaries of these typologies are often blurred as they are a product of engagement among actors with different perceptions of participation (Cornwal, 2008).

The role of local communities in wildlife conservation is increasingly becoming crucial in conservation projects. History of people's participation in conservation has experienced a paradigm shift from exclusionary 'Fortress conservation' approach (Brockington, 2002) to inclusive community–based conservation (Rodgers et al., 2003). Involving local people in conservation is favoured as it is seen as legitimate, fair and just (Brockington, 2002, 2004) and also efficient and cost–effective (Mehta and Heinen, 2001; Badola et al., 2012). Studies in Asia and Africa show that engagement between external and internal actors and the degree of participation of various groups create differential perception and attitude towards the impact of the conservation programs (see Songorwa, 1999; Lepp and Holland, 2006; Badola et al., 2012) but the process of local community participation in a state–driven or a community–driven or a co–managed conservation process has not been examined in detail. In this paper, we aim to shed light on the people's participation in wildlife conservation projects in India.

Decentralized institutions and autonomous community efforts have often been considered a better model for community mobilization to conserve natural resources (Pathak, 2009) but the scale of ecological impacts is questionable (Bajracharya et al., 2005; Shahabuddin and Rao, 2010). Though seen to be effective in some cases, degree of participation in natural resource management programs was found to be influenced by economic factors (income, land, livestock), social factors (gender, age, education, caste, norms), benefits

⁷ This development paradigm counters the growth–based development. It comprises concepts of bottom–up approach to development, human development, people–centered development, participatory development.

from resources (firewood, fodder) and access to influential people (Agrawal and Gupta, 2005; Agarwal, 2001). Most of the wildlife conservation projects in India are largely implemented and managed by biologists, with little or no training in social sciences. In Northeast India, wildlife conservation projects are often implemented without engaging in the socio-political and historical realities of how communities work. Conservation workers often have little or no appreciation for the local people's concept of nature conservation or even local ways of conservation (Aiyadurai, 2016). Northeast India, with its rich biodiversity has attracted a large number of NGOs and conservation organisations who have reached out to the local communities to engage as partners in wildlife conservation projects. Various models of conservation exist in Northeast India ranging from state driven protected areas⁸ (PAs) to community conserved areas⁹ (CCA). Different actors are also involved in these projects such as Government agencies, NGOs, media, researchers and the local community.

In this paper, we examined three wildlife conservation projects in Northeast India to understand the factors driving community participation. We anlayzed the notion of participation as a process, rather than a product. The aim was to understand why communities participated and instead of exploring the socioeconomic and political measurable indicators of participation (as done in Agrawal and Gupta, 2005) we studied the contextual process which result from the everyday-interaction between different stakeholders which ultimately enhance or hamper the participation. Through our understanding of participation as a process, we also aim to present how conservation practitioners could improve their understanding of local community participation.

Findings

Ten factors were identified that affected the process of participation of local people. These factors were not mutually exclusive of each other and did not linearly follow each other in the process. These factors overlapped and even affected each other. We further grouped these ten factors into three broad categories: trigger factors, negotiation factors and sustenance factors (See Table 3). Trigger factors are responsible for kick-starting the projects and the participation of local people in the conservation project. Negotiation factors were induced by day-to-day interaction between local community and external actors and also intracommunity dynamics. Sustenance factors affect the long term existence of community participation in the conservation project. In the following sections, the three categories are discussed.

⁸ For example, Pakke Tiger Reserve (Arunachal Pradesh); Kaziranga National Park (Assam); Intanki National Park (Nagaland).

⁹ For example, Thembang–Bapu Community Conserved Area (Arunachal Pradesh); Sendenyu Community Biodiversity Reserve (Nagaland).

Table 3 Factors affecting community participation in selected conservation projects

S. No.	Factors	Description	
1	Trigger	Crisis narrative	
		Facilitation by external actors	
2	Negotiation	Effective entry stage activities	
		Mediating actors from the local community	
		Alternate/additional income opportunities	
		Intra-community dynamics	
3	Sustenance	Tangible/intangible results	
		Capability enhancement of local community	
		Funding	
		Role of information	

Trigger factors

Crisis narrative: All the conservation projects were preceded by a crisis narrative. In Goalpara, severe damage of assets and loss of human life due to elephants; in Singchung, conservation of the newly discovered bird and the need for immediate care and conservation; and in Pangti, international shame brought to the villages due to mass–scale hunting, triggered the local community to participate to overcome the crisis. Even though these projects operate at different levels, the crisis has not been averted. Elephants still damage property and kill humans; Eaglenest and adjoining forest continues to face anthropogenic pressure and shame can return if Pangti goes back to hunting. So a crisis narrative seems necessary as a trigger to facilitate conservation projects and community participation. In Garo ¹⁰, a tribal village in Goalpara, elephants' presence and damage was significantly reduced and the community became complacent thinking that the crisis was over. They stopped maintaining the fence which resulted in further damage. In 2017, without any help from the NGO, the villagers contributed for a new fence by themselves and erected it.

Facilitation by an 'external' actor: In all the sites, communities did not initiate the project but other 'external' actors were involved: in Goalpara, it was the regional NGO; in Singchung, it was the wildlife researchers and later forest department and in Pangti, it was the regional and national NGO, media, administration and forest department. The focus of these external actors was to achieve conservation goals in

¹⁰ Garos are listed as Scheduled Tribes in India. Presently majority of the Garos are Christians and few follow animism. They mostly live at the Garo Hills districts in the state of Meghalaya and pockets of population are in Goalpara, Kamrup and Karbi Anglong districts of Assam.

a socially just and convenient manner by integrating community at various scales. The designing, planning and implementation of the project was carried out by external actors.

Negotiation factors

Effective entry stage activities: The external actors at the initial stages carried out many activities including biological surveys, awareness programmes, meetings and dialogues. In Goalpara, socio–economic surveys along with the mapping of village boundary, resources and elephant movement paths were documented. Few villages were selected for monitoring and documenting elephant movements and conflicts on a regular basis. Repeated trial of field based conflict mitigation kept the community interested in the project. In Singchung, prior biodiversity assessment helped the eco–tourism to boom. Initial meetings, workshops and negotiation by the forest officials and researchers with the Buguns took place for almost two years. With the agreement of the majority, the village council allowed the forest department to notify the community land as community reserve. In Pangti, after the ban of hunting, the NGOs set up 'Friends of the Amur Falcon' as a conservation education program. With the help of national and international donors, they launched eco–clubs in several schools and trained the educators. Interactive reading materials and posters, badges were developed for the eco–clubs where kids would learn about the migratory nature of the bird and its conservation importance. Another NGO paid the ex–gratia to the village council to be distributed to the affected landowners and constructed a guest house in the village. TheForest department put forward livelihood schemes like poultry and piggery and built watchtowers to augment tourism.

Mediating actors from local community: It was extremely difficult for the NGOs to convince the whole community in one go. So, committed individuals from the community were selected; who were influential social leaders and elites. The legitimacy these individuals helped in convincing the larger community to participate in the projects. In Goalpara, the AHP staff themselves were from the project site and they became the main driver of building rapport and continued communication with the project villages. These staff were selected strategically as one of the AHP staff puts it, "we did not select on the basis of any degree or education status. Since the work involved community, we wanted people who were from the very place and who have themselves been victims of elephant conflict. Today I am not a face of AHP, but my staff is." In Singchung, a respected elder in Bugun society was particularly instrumental in setting up the tourism and spearheaded the formation of the community reserve. In Pangti, the village council chairman and the president of fishermen union, played a vital role in establishing AFRAU which looks after the protection of the Amur falcons. These mediating actors also become spokespersons for the community. One of them said, "we had meetings with the village council. We took pledge while holding a candle in our hand that we will not hunt those birds. Majority agreed with the decision." But when individuals become indispensable part of

these projects, the community tends to rely on them. The forest official of Eaglenest WLS who supported the community reserve was afraid that it would be disastrous to the reserve if he gets transferred to another place. The AHP staff in Goalpara had the same opinion.

Additional/alternate income opportunities: The conservation projects presented explicit or implicit additional/alternate income opportunities for the communities which were seen important for participation. In Goalpara, in partnership with other NGOs and government departments, livelihood trainings were conducted every year for farmers and SHG (Self Help Groups) on organic horticulture, pig and poultry, fishery, weaving and bee–keeping. In Singchung, the villagers now look at the community reserve as Pandora's Box for development and other benefits. One of the community members said, "if tourism happens, then it will be helpful. Singchung will develop. People will know about Singchung and they will know about us, Bugun." In, Pangti, the community thought that development and employment would 'arrive' to this village 'riding' on this bird. As one of the villagers said that "The motivation is development. That is why we are protecting this bird. We are chasing for development. We have asked for road development, eco–tourism, and guest house and so on. Let's see what happens."

Intra-community dynamics: Intra-community dynamics are often overlooked in conservation projects and this affects the projects in unpredictable ways. A village in Goalpara could not expand fencing because few moderately well-off households were not particularly affected and therefore they refused to pay for the maintenance. This increased contribution per capita for the affected households. Consensus could not be reached due to disagreements on solar fencing. During such incidences, the numerically dominant tribe (Rabha¹¹) accused the minority (Bengalis¹²) for their negligent attitude. According to the Bengalis, "those who live in the middle of the village do not care about the fence. They think it is the responsibility of the people who live near the boundary of the villages. So we face public shame. We will maintain it even if others do not. Penalty is not an issue for us, but such public humiliation is a matter of shame for us."

In Singchung, the bird-tourism project created tension between an influential member and other Buguns. Most of the Buguns with limited knowledge about the tourism, felt that there is no transparency. In Pangti, presently under the 'success' of zero hunting, tension is fuming. According to the village council chairman, majority of the affected people have lost hope for development and given the dire need for livelihood, they want to return back to hunting. He said, "people have sacrificed here so much, but they hardly got anything out of it. If it continues for two to three years, the desperate groups can form a majority and could get consent that the hunting ban should be withdrawn".

¹¹ Rabhas are listed as Scheduled Tribes in India who largely follow Hinduism. They are mostly concentrated in Goalpara and Kamprup districts (Assam), Garo Hills district (Meghalaya) and Jalpaiguri district (West Bengal).

¹² Bengalis are Bengali speaking migrant community who had been staying in the area for two generations.

Sustenance factors

Tangible/intangible results: Having a positive tangible or intangible result was necessary to keep the community interested. In Goalpara, strategies reduced conflicts in the project and cultivation of high yielding value cash crops was promoted within the fencing boundary to offset the economic losses. According to a villager, "the fencing is a community material. If some problem arises, the whole community comes up to work. We check which part needs repair, which post needs replacement. They (NGO) have given this to us, now we will maintain it. If any person fails to come to maintain the fence, he or she is penalised at Rs. 30." In Singchung, the tourism was successful within the first year. In Pangti, the situation was complex and results were mixed. The media hailed the people as 'hunter-turned conservationists' working for a new hope in Nagaland as no falcons were reported to be hunted till date since 2013. Tourist numbers have also increased, especially birdwatchers from overseas, but monetary benefits could not reach more than 50 individuals and the amount is negligible as compared to what they earned from hunting. Therefore, alternate livelihoods could not be sustained. One of the villagers expressed that "Pangti has sacrificed its land and Pangti is preserving the falcon. But Pangti did not get any benefit in return."

Pride was an intangible outcome of these projects and acted as a catalytic element for participation. Communities at all the sites were proud that their village and their name have a national and an international recognition now due to the conservation project. "Earlier people from plains did not know about us. Some people have come to know about us due to this bird which was named after us' said a resident of Singchung. Three falcons at Pangti were fitted with radio transmitters for understanding their migration route and they were named 'Pangti', 'Naga' and 'Wokha' after the names of the village, the tribe and the district respectively. This created immense pride among the locals.

Capability enhancement of local community: In Goalpara, due to repeated hands—on training and workshops the villagers felt that they have learnt new skills, gained confidence and their decision making power has improved. The AHP staff were particularly positive about their enhanced skills gained through exposure visits to national and international conservation project sites and workshops on elephant, ecology and conservation. The staff is now able to take field level decisions independently and keen on continuing their work. "I want to continue doing it. I like this work. First of all, it is an income source. Secondly, I feel great working with nature. I get to know and do so many things about animals. I get to meet so many people. It feels good" said one of the AHP staff.

In Singchung, the patrolling scouts were able to plan activities independently. They were also given training on GPS mapping, wildlife rescue and species identification. But respondents perceived the ad-hoc

community reserve management committee to be incapable of taking decisions. The patrolling scouts favoured communicating with the forest official directly for guidance rather than the committee. The forest officials felt that the community is not motivated enough, there were more 'Doers' rather than 'Thinkers' and the community was not taking initiatives independently and had to be spoon—fed everything.

In Pangti, exposure to many of the external actors helped the community to bargain for development with higher authorities. At the start of the conservation effort, they were able to understand the benefits and the loss of participating in the project, but, now are faced with a question about how to bring development while protecting the falcon.

Funding: Funding was the most important external factor to both community participation and sustenance of these projects. AHP had to face problems due to the discontinuation of funding, but the staff was motivated enough to continue the work, even with the uncertainty of the project. The project proponents are now looking for domestic funding to continue. In Singchung, initial funding was necessary to initiate eco—tourism activities and assessing biodiversity. In the community reserve, funding was necessary to employ the local youth, which motivated others to get interested in the conservation activities at the reserve. In Pangti, the development was affected due to perceived mismanagement of the conservation fund contributed by the government.

Role of information: Availability and accessibility to information affected the community's willingness to participate at all three sites. With information in hand, the community was clear about the benefits and losses, and they were more supportive of the activities. It facilitated space for dialogue and effective conflict resolution. The technical know–how of interventions (in case of Goalpara) and knowledge of law (in case of Singchung) was concentrated among few external actors (NGOs, forest department). In Singchung, although a community fee is levied from the tourists, which goes to the village council fund, the information about it was strictly confined among a few influential people. In Pangti, inaccessible information about how the village council was working with the NGO and the forest department also caused intra—community tension in the beginning.

Discussion

Although the three sites differ economically, socially, culturally and politically, the common element in all these conservation projects is the active engagement of the local community. Each conservation project was context specific and the level and degree of participation differed according to various stages and activities. Keeping the ladder of participation in mind, we found that communities participated by gaining material incentives, providing labour and getting involved in workshops. In Goalpara, the participation

between the local people and project managers was more interactive during the maintenance of solar fencing. In Singchung, it was interactive in the beginning and later it became consultative. In Pangti, coercion was used to encourage people to participate at the initial stages. However, transformation within the community was not observed, probably due to fact that major project decisions were pre–decided by the proponents.

Our findings corroborate barriers and catalytic elements affecting local community participation through a process identified by Botes and Rensberg (2000), Seixas and Davy (2008) and Rodrigues–Izquerdo et al. (2010), i.e. role played by external actors, selective participation, conflicting interest, important individuals and leaders, funding and immediate results.

Crisis narratives are important to trigger certain interventions initially but when multiple actors are involved, often the dominant actors' narratives get precedence. In our sites, domination of narratives from each actor is missing; rather, the ultimate narratives driving the conservation projects and participation are combinations of narratives of different actors. All these actors found convergence with other actors' ideas and a co-operative environment was created. Divergence of narratives caused conflict which was found in the case of Pangti and Goalpara. No actor completely discarded their own narrative, but certainly refined it based on their interaction with other actors and the deliverables of the conservation projects.

The conservation at the three sites was initiated by external actors. In such less-developed and isolated places, where a perceived government apathy exists, NGOs and other external actors fill the void and facilitate the community to get connected to the outside world. They create the big picture where a community can 'develop' by participating in conservation and have pride by associating themselves with the project. These external actors are shaping the nature and outcome of conservation action by strategic engagement, tacit involvement and 'boundary interaction from conflict and contestation to co-operation' (Larsen and Brockington, 2018: 4). These external actors brought particular technical and managerial skills as well as resources to the project and invested in building capabilities of local community.

Entry-stage activities and additional/alternate income opportunities constitute a crucial part of any conservation project. The linkage between development and conservation should be coherent and project proponents should not strive for isolated goals (Salafsky, 2011). India's eco-development projects were often criticised to have fuzzy linkages between development and conservation. These projects initially provided conservation benefits (Mishra et al., 2009) but did little to change the perceptions of the local people and legacy of these projects was found to be left with the community (Arjunan et al., 2006; Macura et al., 2011; Gubbi et al., 2009). The disconnection between conservation and development goals can lead to a situation like Pangti and Singchung where ecotourism is often put forward as a middle path. But ecotourism

enterprises have also been criticised due to marginal local employment, elite capture of resources, limited participation by vulnerable groups, poor management and negative environmental impacts (Bookbinder et al., 1998; Karanth and DeFries, 2011). So the project proponents in Singchung and Pangti need to establish benefit sharing mechanism before up—scaling ecotourism.

The mediating actors are local committed individuals and leaders, who are often seen as agents of change and as per Timmer (2004) they are often innovators, communicators, learner, bridge—builders and systems thinkers. Seixas and Davy (2008) found that these individuals are often better educated than the other members of the community. In our case, the level of education coupled with social status (headmen, teachers, government employee) played a critical role in producing social legitimacy of these individuals as local proponents of the conservation projects. Although institutions in natural resource governance in South Asia have been studied deeply (see Agrawal & Gupta, 2005; Agrawal, 2007), the specific roles of these individuals need to be understood better.

At the three study sites, capacity building of the community was often seen as educating them with necessary skills through workshops that would help in achieving pre–decided conservation goals. But this method seemed to be hindering the fulfilment of full potential of effective community participation. Rather than a one–way provision of knowledge, capacity building should be a shared learning space for both, the local community and the project proponents (Berkes and Seixas, 2004; Seixas and Davy, 2008). The project staff also needs to learn participatory methodologies, for which specific funding is necessary (Rodriguez–Izqueirdo et al., 2010).

In the neo-liberal paradigm, the conservation projects are dependent on and shaped by funding agencies (Larsen, 2018: 27). Seixas and Davy (2008) while analysing seven community-based conservation projects under the 'Equator Initiative' found that funding may not be necessary initially, but when the community independently initiates conservation process for long term, funding and involvement of external actors becomes necessary. Most of the funds in our field sites were used to create infrastructure and capacity building of the community. In the absence of funding, project in Goalpara experienced abrupt halt and the other two were facing periodical hiccups. So in order to sustain the projects, securing long term funding is necessary.

Intra-community dynamics has often been found to limit long term success of conservation projects as different interest groups seldom share common vision and objectives (Agrawal & Gibson, 1999; Botes and Rensberg, 2000). All of our project sites have suffered from narrow understanding of community and the project proponents invested their funds, time and energy to overcome it. The project should address these

issues within the community in the initial stage and therefore, a stakeholder analysis seems to be an effective tool (Reed, 2008).

We argued that available and accessible information is absolutely critical for effective participation of community. Similar arguments were presented in other disciplines such as development studies, public health and natural resource management (Madon and Sahay, 2002; Gupta, 2008). Evaluations of communication modes between community and external actors should be done. Key information should be identified and disseminated clearly and periodically with the majority of the community. Improved and innovative mode of two way communication should be tried, as this will help the community to take informed decisions.

Conclusion

In this paper, we analysed three conservation projects from Northeast India, each distinctly situated in their own socio-cultural reality but linked to the common thread of local community participation. Community participation in conservation projects is advocated and practiced but the nature of participation remains understudied. We found various external as well as internal factors, often compounding with each other and influencing participation of local community at various stages of the project. The factors included: presence of a crisis narrative, involvement of external actors, effective entry stage activities, commitment from local individuals and leaders, alternate/additional income opportunity, tangible/intangible results, capability enhancement of locals, funding, intra-community dynamics and availability of information.

We recommend that development and conservation goals should have a clear linkage and apart from investing time and funds on 'hard' issues like technical interventions, sufficient attention should be given on 'soft' issues of participation, social process and capacity development. Stakeholder mapping is absolutely necessary to understand different interest groups and different strategies should be developed to engage with such groups. While commitment and motivation from individuals should be encouraged, but care should be taken that they do not become local elite power centres. Periodic feedback sessions should be organized for two—way learning of community and project proponents. This will help both the groups to take informed decisions for selection of activities and to participate in them. Since these projects are invariably fund—driven, securing long term funding is necessary till community becomes self—mobilized and independent. Training of project staff in participatory methodologies is necessary. To understand conservation as a process, long term ethnographic research on conservation projects should also be undertaken.

CHAPTER 6: 'Everyday-Conservation': A study of actors and processes in Conservation projects¹³

Abstract

Existing studies on community-based conservation in India often highlight the outcomes and the effectiveness of the conservation interventions rather than on the dynamics of various actors and their interactions. This paper demonstrates conservation as a social process where the actors interact with each other on a daily basis that shapes conservation. We use the notion of 'Everyday-Conservation' to highlight that actors use their resources, skills and limitations to create a space where conservation processes are negotiated. Using ethnographic work carried out in Assam (India), the paper analyses an Asian Elephant Conservation Project to understand various actors involvement and their interactions resulting in 'Everyday-Conservation'.

Drawing on the concept of actors and agency; actor-oriented sociological approach and sociology of everyday life, we identified different conservation actors and their mutual interactions situated within the project. We found strong and weak interactions among different actors which resulted in negotiation, collaboration and conflict. We argue that rather than being an array of isolated policy-determined activities, conservation is a social process which is shaped on an everyday basis through interactions of different agencies. We recommend that community-based conservation needs rethinking and the framework of 'Everyday-Conservation' can bring new perspective in understanding community-based wildlife conservation.

Introduction

Conservation is essentially a human pursuit. As Mascia et al. (2003: 2) puts it "Biodiversity conservation is a human endeavor: initiated by humans, designed by humans, and intended to modify human behavior to achieve a socially desired objective—conservation of species, habitats, and ecosystems." Therefore, the importance of social science research in biological conservation is gaining attention (Bennett et al. 2017). Conservation actors take part in various capacities and bring different resources. Traditionally, conservation actors have been broadly divided into four categories, namely, the state, community, market and non-government organizations (Salafsky et al. 2001; Berkes 2004). According to their purposes, these

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actors can be termed as conservationists, stakeholders and opponents. Conservationists are individuals or groups who actively plan, design or implement conservation agenda; stakeholders provide necessary support to realize the full potential of conservation and opponents are those whose action or inaction hinders conservation.

Conservation occurs in a social context and the social processes between actors shape actions and outcomes. Much of what happens in conservation is the result of the interactions between the actors, the power and resources that these actors bring to the table with their respective agendas. Conservation literature has mostly reported the outcome of conservation rather than this process of change (notable exceptions are Mahanty 2002; Balint & Mashinya 2006; Robbins et al. 2009; Rastogi et al. 2014). But it is necessary to understand the interaction-based context within which an intervention succeeds or fails.

In this paper we argue that conservation as a social process is played out on a day-to-day basis as and when actors interact with each other on the ground. Rather than isolated activities, actors interact repeatedly, deliberately and sometimes in an ad-hoc way which results in a social change. We use the notion of 'Everyday-Conservation' to highlight that actors in conservation projects, use their own resources, skills and limitations to create a space where conservation processes are negotiated. Using ethnographic work, carried out in Assam, on the Assam Hathi Project (AHP)¹⁴, the paper describes the involvement of various actors and their interactions to demonstrate how 'Everyday-Conservation' occurs.

Conservation actors and processes

Jepson et al. (2011) argues that conservation actors are entities who have agency i.e. these actors are independent to create or take an action and influence others. As per Jepson et al. (2011), these actors include humans, wildlife as well as inanimate objects like policies and technologies. In our case, however, we have limited our definition of conservation actors to only human actors. So, these human actors, besides having capability to take actions, also have voice, choice and willingness to act. These actors do not work in isolation but steer their intentionality to constantly negotiate and engage in either collaboration or sometimes conflict by establishing networks (Rhodes 2007).

From a development theory perspective, Long and Long (1992) and Long (2004) argue that development interventions create 'battlefields of knowledge' between socially and culturally discontinuous actors and interactions between these agencies shape the field. These interactions create an 'interface' where linkages, networks and boundaries of knowledge are developed between individuals and groups whose

 $^{^{14}\,\}textit{Haathi}$ in local Hindi an Assamese language means elephant.

shared expectations further shape the interface (Long 2004). Rolling (2001) argues that such interactions at the interface may not always end in conflict or 'battle' as Long (2004) theorized; it may also lead to trust and reciprocity, negotiated agreement, social learning, conflict resolution and collaborative action. People wield their agency to "create coherence among values, theories, perceptions and actions, and maintain correspondence or structural coupling with the context (Rolling 2001: 10).

Similarly, according to Tsing (2005), interactions between actors result in cross-cultural encounters, sometimes leads to confusion, amusement, frustration and conflict. All these result in an outcome of interactions and occur during the encounter among the actors. These interactions may sometimes even result in profound disconnect between the expectations and goals of each group leading to disappointment for both (West 2006). The interactions could be unequal and unstable which may produce 'friction' (Tsing 2005: 4). Therefore, conflict and tension may often arise from the way actors are engaged. Actors do not engage objectively and they bring their own 'environmentality' at the interface, thus making these interactions inherently value-laden and political (Agrawal 2005; Fletcher 2010; Robbins 2011). Actor-oriented conservation studies are rare in India. Aiyadurai (2016) studied negotiation among different actors to declare as a tiger reserve at Sino-India borderlands of Dibang Valley Arunachal Pradesh. She identified key actors in the project (local community, urban scientists, forest department, conservation NGOs) and found that the debate around the proposed tiger reserve was actually assertion of competing agencies of these actors. Mahanty (2002) studied community-based conservation project in Rajiv Gandhi (Nagarhole) National Park in South India and found that actors, networks and their processes of negotiation were important for effective conservation interventions. She recommends that practitioners should focus on negotiation and network building as a central part of conservation process. Therefore, concentrating on the role of actors and how they interact can provide insights for effective conservation.

Wildlife conservation and 'sociology of everyday life'

Another framework through which one can understand conservation projects is through 'sociology of everyday life'; a sociological enquiry to understand how time, space and power interact to form lived experiences of humans in the everyday (Kalekin-Fishman 2013). This theme proposes to understand how conformism and non-conformism are constructed through human actions (Sztompka 2008): where human actions are constrained by both human agential characters like behaviour and attitude and macro-social structures and cultural environments. Sztompka (2008) addressed 'everyday life' as the 'only life that people live' where 'the constraints of structures and dynamics of actions produce the real, experienced and observable social events' (Sztompka 2008: 3). How does it help to reassess conservation projects? Wildlife conservation may not carry the same meaning for all stakeholders. By relying on various narratives and

discourses of everyday life, we aim to understand multiple realities of what happens in a conservation project. We believe that little attention has been paid to everyday manifestation of wildlife conservation. 'Sociology of everyday life' has the capacity as a theory and as a method to understand these interactions and to treat conservation as a process and not simply as a product.

This study examines largely the neglected human-dimensions of conservation by asking how wildlife conservation is experienced in everyday situations? To understand involvement of conservation actors and interactions among them, we examined a community-based conservation project in Northeast India which was focused on human-elephant conflict mitigation. In the following sections, we have elucidated the premise of the conservation project, the conservation actors involved and how interactions among them gave rise to what can be termed as 'Everyday Conservation'.

Human-Elephant Conflict in Goalpara

Key informants as well as the respondents informed that historically, elephants were not a part of the Goalpara landscape. Elephants first entered this landscape in 1993 from Garo hills situated on the south of Goalpara in the neighbouring state of Meghalaya, which has been a stronghold of elephants. According to a project staff in Gaolpara, "the nearby hill forests in Meghalaya were being used by insurgents ¹⁵ for shelter leading to major deforestation. Due to this disturbance, elephants moved to Goalpara. Gradually this place became a regular home range from seasonal range." People still remember the sudden chaos it had created because they were not used to living with elephants. A village elder from Kalyanpur village in Goalpara described his first encounter with elephants in 1993.

"I first saw elephants in my life in 1993. I remember three elephants came to this area, one of which was a calf. One night, I was sleeping. Suddenly I heard a noise and I came out of my room. I saw one elephant in my compound trying to break my kitchen wall. I immediately took my children and wife and went out from the other side. I felt guilty as I could not take my parents with me. I gathered some people and finally warded off the elephants. Those elephants created havoc for many days. Finally department (forest) shot them and captured the calf. We thought this was a stray event, but NO! Herds of elephants started coming in following years and it hasnot stopped since then. Many houses as well as crops have been damaged over the years." (5 January, 2018, Goalpara)

¹⁵ There are plenty ethnic insurgent groups operating in North Eastern states in India. Their objectives vary: few groups strive for secession from India through armed struggle, some wants greater visibility in electoral politics and other groups fight for formation of new states on ethnic lines within India.

AHP was initiated in 2003-04 in Goalpara by two collaborating organisations: Chester Zoo-North of England Zoological Society (NEZS), based in London and EcoSystems-India (ESI), based in Guwahati, Assam. Chester zoo has an internal mandate for initiating conservation intervention for species which are available in their exhibit, in this case the Asian elephants. They were in search of a project where they can participate actively from planning to implementation and chose to work on the human-wildlife conflict issues. By the end of 2004, the project in Goalpara was formalised and goals were to facilitate the conservation of elephants by mitigating Human-Elephant Conflict in Assam through (1) capacity building to protect communities from elephants, (2) fostering knowledge and tolerance of elephants, and (3) studying the spatial patterns of elephant herds for land-use strategies and local implementation of the Convention of Biological Diversity (CBD). Initially Chester zoo funded the programme, but later the project received prestigious Darwin Grant in 2007 and a Post-Darwin grant in 2010.

Villagers initially began by using crude methods such as noise and fire to ward off elephants and collectively guarded crops at night. Though these methods were partially effective, they were dangerous as people got physically close to elephants and this resulted in either injuries or deaths. The project proposed an array of mitigation strategies that were effective and required lesser cost, local materials and crude technology. Spotlights were distributed to the villages and later trials were conducted with trip-wire alarms, chilli-based deterrents and solar fencing. A mid-year review by the funding organization found these techniques to be efficient, cost effective and 'good value for money' (Wild 2009: 5).

Some strategies were not effective but others succeeded. Trip-wires got easily damaged or stolen and also raised false alarms, so they were discarded. Chilli smoke and chilli fences were popular initially, but were later discontinued due to elephant's quick familiarization to them, high cost and unavailability of strong chilli and community's loss of interest as the maintenance of the fences was tedious and time-consuming. Spotlights worked well in warding off elephants and it is still continued. Community-based solar fencing was most successful. Fencing material was provided by the project and the community was involved in construction and maintenance of the fence. It was decided that after erection, the fence had to be maintained by the community with their own resources. The idea behind this decision was to create a sense of community ownership over the fence so that they do not think of it as a free gift. A total of five power fences in 5 different villages were installed. Due to successful maintenance of these fences, elephant incursion in the village premises was reduced. Thus, a unique conservation and development model was set up through AHP where advisors and decision makers in London and Guwahati engaged with rural communities to help mitigate the conflict with elephants.

Conservation Project Actors

We identified five human agencies as actors: project managers, project staffs, local community, forest department and funding organization. Actors interacted with each other with various frequencies, intentions and intensities. These interactions have shaped the project in its present-day form. The project managers and project staff had direct interactions with all the other actors whereas, the funding organization did not have any interaction with the forest department and local community. Here, we have defined strong and weak interactions. The interactions which were face-to-face and more periodic are termed as strong interactions (indicated by black arrows). Weak interactions are those which emerged from infrequent and less important, interactions.

Strong Interactions

Funding organization-Project manager interaction

The Darwin Initiative supports projects led by UK-based institutions on biodiversity conservation in countries that are rich in biodiversity and in need of financial support. There are five priority areas: institutional capacity building, training, research, implement CBD¹⁶ and environmental education (Wild 2009). Darwin Initiative was important as it provided financial support and "instilled confidence through its feedback and encouragement" (Zimmerman et al. 2010). Funders reviewed the project twice and commented that the project was well-designed, cost efficient, innovative, effective, and locally impactful and was an example of successful Darwin project (Wild 2009). As per the recommendations provided by the donors, the policy and strategies were again fine-tuned to induct an organised and planned approach towards conflict mitigation and livelihood generation. Due to positive reviews, the project was expanded to other villages and it also ventured into alternate livelihood generation when Darwin grant was available.

"It happens quite often that you as an organization get convinced to take up tasks earlier than needed just because funding was available. So if we say we want to continue only with deterrent the funders may not like it. But if I say I want to do livelihood also, getting funding will be easier." (Project Manager, AHP; 23 February, 2018, Guwahati)

Thus, project managers at times had to frame the project as per the funding organization's requirements. Although the approach is top-down, the interactions were frequent and important for the course of the project.

¹⁶ CBD or Convention of Biological Diversity is a multilateral treaty which entered into force in 1993 after the Earth Summit in Rio de Janeiro in 1992. The main goals of the convention are conservation of biological diversity, sustainable use of biodiversity and equitable sharing of biodiversity values. 196 countries are parties to the convention out of which 168 are signatories.

Interaction between the managers

The principal investigator of the project from NEZS came to Assam to check the feasibility of a potential elephant conservation project in 2003 and met the project investigators of ESI. After initial apprehensions about each other, they collaborated successfully.

"They were keen to work with a smaller organisation who would be equal stakeholder in the project. There were bigger organisations, national and international, already working on human-wildlife conflict in Assam. They had reservations about larger organisations with the apprehension that Chester zoo's role may be overshadowed or the project could be hijacked. For us it was a good opportunity." (Project Manager, AHP; 23 February, 2018, Guwahati).

In a mid-term independent review of the project, the smooth partnership between the two organisations was praised due to clear roles, mutual trust, good communication, knowledge sharing, flexibility in programming and shared decision making (Wild 2009). The team from NEZS managed the strategic vision, provided technical advice (human-wildlife conflict research, Geographical Information System) and took care of financial management and liaison with media and scientists. Scientists at NEZS published reports and articles at international forums (see Davies et al. 2011; Chartier et al. 2011; Wilson et al. 2015). ESI provided its expertise on community-based conservation, recruited local staff and researchers, maintained local finances, collaborated with other domestic NGOs and implemented the project on the ground.

Interaction between the project managers was frequent, structured, and formal. Apart from regular discussion over e-mail and telephone, the project manager from NEZS visited the project site multiple times and managers from ESI visited Chester Zoo for discussions on the ongoing project. The interaction was also based upon mutual trust, accountability and understanding of strength and weakness of each other. The partnership between NEZS and ESI has been continuing till date and this partnership has been appreciated by project reviewers. The project had a combination of people with different set of skills. Some had skills for applied social science, some had skills for conservation science and some had in-depth field knowledge. Thus, knowledge sharing happened in an interdisciplinary environment and this helped the project to become compatible with field realities.

Project manager- local community interaction

The team selected villages initially for in-depth understanding of the conflict and interventions. High frequency of HEC and community's interest to collaborate in the project were criteria of selecting the villages. The senior project team of ESI consulted village communities to finalise project villages through public meetings and dialogues with the village leaders. Initially, the communities were sceptical of the project motive, but they overcame it overcome strategically.

"We had public meetings in the villages where we shared our views. We found that there was angst among the people against NGO which had earlier worked in the area. So the people had mistrust and thought another NGO should not come. Forest department has long been held as enemies. So we did not bring any forest or administrative officer with us. We also thought that rather than putting elephant at the centre, we should put the people as primary agency. We decided that we would not say that we wanted to save elephants; rather we wanted to save you. We showed them presentation on elephant movements and food habits and proposed what we wanted to do. We decided that we would not make any promises or we would not come and distribute freebies. We said we want to work only if the community decided to be equal partner." (Project Manager, AHP; 23 February, 2018, Guwahati)

These kinds of meetings were important as depending upon the feedback obtained from the meetings, the project was shaped for the future. The meetings were also important for the project managers to uphold their transparency and accountability.

When the community consented for co-operation, socio-economic surveys were carried out. In addition, village boundaries, farmlands and elephant movement paths were meticulously mapped to fine-tune the interventions. Village headmen and other socially important persons were approached who acted as a bridge with the other villagers. Once the interventions were systematized, the programme managers took a backseat and let the programme staff members coordinate the field activities such as communicating with project villages, conducting training sessions, etc. Workshops on veterinary, horticulture, bee-keeping and other income generating activities were conducted where around 500 villagers participated. This helped the project team to gain trust of the local communities and they viewed these interventions very positively. These workshops were also attended by staff from NEZS.

"They feel very proud. They go to other villages and tell that people from England had come to visit them. This helps in our project activities." (Project staff, AHP; 9 January, 2018, Goalpara)

This interaction was frequent at the initial stages of the project, but later as project staff started playing a lead role the project managers were less involved with the community.

Project manager-Project Staff interaction

The project staff was the core strength and foot soldiers of the project. There were two categories of staff: field monitors and field assistants/co-ordinators. Field monitors were recruited to check elephants' movements and document conflict incidences. Field assistants were community facilitators and grassroot implementers. Barring the main field co-ordinator, all other project staff were selected from the affected villages to oversee intervention activities.

According to the chief field co-ordinator,

"Our ideas never clashed. It was a good thing on the part of madam (project manager who is from Guwahati) that she understood the ground reality and she patiently heard us who were closer to the field. She always asked what would work. At times she gave inputs on what better could be done but there was never a conflict." (9 January, 2018, Goalpara)

The staff members were selected carefully from the local community, at times who had experienced conflict themselves. This is a crucial decision to select people who understood the issues on the ground and could connect with the local community relatively easier than the outsiders.

"We did not select our staff on the basis of any degree or education status. Since the work involved community, we wanted people who were from the very place and who themselves had suffered from elephants. I was the initial face of AHP but today if you ask me I am not the face of AHP in Goalpara, but my staff are." (Project manager, AHP; 23 February, 2018, Guwahati)

A particular field assistant Dhananjay (name changed) deserves a special mention. He has been working for more than 10 years and is associated to AHP's first project. On a typical working day, Dhananjay wakes up early and tends his kitchen garden. He then calls up the elephant monitors based in different villages to gather information on elephant movements. He then calls up the village headmen to know whether elephants have caused problems last nights and whether the solar fence is working well or not. If everything is fine, he fills an online database related to the elephant movements. He then goes to the particular project villages to check if everything is fine regarding community involvement and health of the equipments provided. Apart from this daily routine, he occasionally discusses what project managers are thinking about the future of the project and what villagers are expecting from the project. He also plans what kinds of trainings are required for the villagers so that they become self-sufficient. He demonstrates how the conflict mitigation strategies works, helps villagers physically while erecting solar fences, knows basic electrical work to rectify failure of spotlights, stabilizers, batteries and solar panels and is a para-medic for livestock. Thus, he resolves issues that arise every day and in many ways embodies what we are proposing as 'Everyday-Conservation'.

Describing the motivation for project staff, project manager mentioned, "We gave the decision making responsibility to our staff. They do not have to call me every time. They know the field better. Monetary compensation to the staff may not be high, but we provide them all the necessary field items, medical and accident insurance. The staff have been given training on computer, camera and GPS. Lot of exposure visits were done for them in foreign countries. Even if I did not go, I made sure my staff went. Our staff have gone to key elephant conservation project areas in Sri Lanka, Africa, Malaysia and Thailand and every staff has visited Chester zoo in London. It is a way of showing gratitude to them and it is a huge thing for them. None of our staff has ever left." (23 February, 2018, Guwahati)

Citing his fondness to work in AHP, one of the staff said,

"I want to continue doing it. I like this work. First of all, it is an income source. Secondly, I feel great working with nature. I get to know and do so many things about animals. I get to meet so many people. It feels good." (2 January, 2018, Goalpara)

The relation between the project managers and project staff was cordial and positive. Mutual respect between the two created a space for more dialogues, knowledge sharing and feedback. The interaction was relatively frequent and it helped frontline staff to become the stewards and the legacy of AHP in this area. Having staff stationed at the villages helped local communities to build trust on the project proponents and activities.

Project staff- Local community interaction

We found the project staff-local community interaction to be most crucial for making conservation work on the ground. While steering through the internal fissures existing within the community, the project staff had to maintain cordial relations with the project villages and face ire as well as accolades from local community. Describing his public relations skills, a project staff said,

"I am such a person who can mingle with local people quite easily. I do not show any *babugiri* (high-class attitude) in the field. I sit with the local people. I take *tambul* (betel-nut) and *khaini* (tobacco) from them. They like me. They find my jokes hilarious. So, less effort is needed to build rapport. Even I used to live in the project village and had gone for crop guarding with the youth. So, people's response towards me was encouraging." (Project staff, AHP, 9 January, 2018, Goalpara)

The project encountered many hurdles. When the project was at its infancy, some people from the local community accused the staff of mismanagement of funds and non-transparent ways of functioning.

"They circulated a rumour that our NGO had raised crores of money and I have collected huge amount using people's signature and in return I allotted them few lights only. I was called in a meeting. I made them understand that there was no mismanagement and the signatures were for attendance in a workshop. I did not linger with this matter as there will always be people who would try to control the village. They were jealous when they saw me was getting close to youths." (Project Staff, AHP; 9 January, 2018, Goalpara)

As evident from the interviews, distribution of spotlights created tension within the community. Although the lights were provided for collective purpose, people perceived it as individualistic as only individuals could carry them and they made claims on it. Many complained of favouritism while distributing lights. The project staff later decided to provide lights either at the village level institutions or socially legitimate persons so that they share the lights. Similar ambiguity was observed for solar fencing also.

In one village, the electric fence was constructed for a particular isolated hamlet consisting 13 Garo households because the conflict was high. With few technical glitches, they have been maintaining the fence for the last 12 years as the area is regularly frequented by elephants. The fence could not be expanded for the whole village as certain households were not particularly affected by elephants. These households were welloff financially and refused to contribute monetarily to maintain the fence. Due to disagreement between these groups, consensus could not be reached on erecting solar fencing. The project staff mentioned that they still could not convince these people even though they belong to this village. These staff have to deal with such sensitive issues frequently. In another village, a new electric fence was established recently. There were two instances when elephants intruded into the village even though the fence was electrified. When the reason was found out, the numerically dominant Rabha tribe accused the minority Bengali community for their negligent attitude towards the fence. A meeting was followed between villagers and project staff and the Rabhas were of the opinion that if the Bengalis remain uninterested, then the fence should be uprooted from their part and used only for the Rabhas as they were maintaining it properly. Project staff reiterated that the fence is a community property and the community should now have the ownership to maintain it. The staff requested the community and the village headman to establish a better system of maintenance and vigilance where majority of the community could participate and non-participants would be fined. They also authoritatively stated that if within two months, improvement was not observed then they would think of withdrawing work from the village. At this, both the Bengali and Rabha attendees, vowed to make improvements in maintenance. Interactions between project staff and the local community were most frequent and strongest of all the interactions. This interaction helped the community as well as the project staff to adapt to each other's strategies and work accordingly. The everyday-ness of conservation is

essentially embodied in this interaction as the everyday lives of the concerned human actors were getting affected through a new social event.

Weak Interactions

Funding organization- Project Staff interaction

This interaction was found to be one sided, as project staff never actually interacted with the funders but there was funding earmarked for staff salaries, their exposure visits to other countries and other capacity building measures. The project staff considered funding to be extremely important.

"Without fund, you cannot do anything. Even if you want to organize some training for livelihood or capability development, you will require fund. For everything you require fund." (Project staff, AHP; 10 January, 2018, Goalpara)

Forest department-Other actor interaction

Forest department was least involved in the project but the project managers as well as the project staff maintained consultative relation with them. The project staff have helped forest department in elephant tracking and census and even provided spotlights in local forest offices. The local community was found to have negative attitude towards forest department. There are several reasons for this. Villagers felt that the department was apathetic towards their misery, especially when there was any incidence of human injury or death. Even though conflict victims were eligible for compensations ¹⁷, very few of them ever received any compensation. At times, the relationship between villagers and forest department could be acrimonious. During our fieldwork, a young villager died because of an accidental encounter with an elephant and people vandalised the local forest beat office as the forest guards failed to take any action in time.

Discussion

In the previous section we discussed the conservation interventions, the profile of the conservation actors and their interactions. During 2004-05, projects such as these in Northeast India were at infancy and the project proponents did not have any model or blueprint to follow. Initial efforts were invested on building relationships and field trials of interventions. As the work progressed, the number of actors increased and so did the complexity of the project.

Agencies and Their Interaction

¹⁷ As per Government policy, compensation is provided to people for loss of crop, property or injury or death due to human-animal conflict. The amount differs in different states. However, Rs. 3 lakh is provided for loss of life in most of the states. Although the compensation system intends to alleviate the household from misery, it is marred with long delay in disbursement, clumsy process, low awareness and meagre amount.

Every actor that we mentioned belongs to socially and culturally distinct epistemic communities who bring their own intent, capacity and expertise to the table to shape conservation process. The policy goals for the project were shaped by the funder requirements. It specifically funds a community-based biodiversity conservation project in developing countries which involves building environmental knowledge, capacity building, research and implementation of international biodiversity agreements (Darwin Initiative, 2018). The project planners choose the geographical area and focal species to meet their organizational goals. In addition to that, a prevailing crisis narrative of human-elephant conflict in Northeast India was very hard to ignore. The project had the fund to begin a socio-ecological change for a better future and the staff saw this as a good opportunity. Their unique local experience and communication skill became the asset of the project as local community was far from being homogenous and passive receptors. The forest department had weak interactions with other actors, but all the other actors had to work within their ambit. Robbins et al. (2009) in their work on the institutionalization of illegal forest use in Northwest India found similar assertion of agency by rule makers i.e. the forest department staff and rule breakers i.e. villagers living in the nearby reserve. He found that communities and forest department had devised a particular relationship to use forest resources in the form of 'a loose mutual understanding built on strained mutual trust' implemented through 'intense face-to-face negotiations' (Robbins et al. 2009: 560).

In our case with multi-directional interactions among the epistemic communities on everyday-basis, which often involved enchantment and disenchantment among actors, the implementation of the policy was not smooth. These interactions created 'Everyday-Conservation' with strong and weak interactions among the actors with three basic modes: negotiation, collaboration and conflict where collaboration or conflict was followed by negotiation. Such kinds of interactions were also observed by Rastogi et al. (2014) around Corbett National Park, Uttarakhand, India where local communities followed a three-step process of initiation, mobilization and action to force forest managers to take cognizance of their problem. Negotiations in AHP happened when these actors met and tried to work together. Initially these actors did not have the measure of agency of the other actors and they tried to build a dialogue to find common avenues. ESI and NEZS found their commonality for working in human-wildlife conflict issues by dividing their roles between themselves. Similar negotiations occurred among project managers, project staff and local community. The field trials involved finding solutions with the community to provide field trial plots, labour and capital. Socio-economic surveys, dialogue with village level gate-keepers, distribution of material often involved rapport building with the community and negotiation for larger interventions. Collaboration was most important for progress of the project. NEZS and ESI collaborated effectively over the years as did the project managers and project staffs. Certain degree of mutual dependence was one of the key aspects of this effective collaboration. ESI took strategic decisions not depending completely upon NEZS and the field staff

also took day-to-day decisions not waiting for a prior approval from the managers. Lack of resources sometimes resulted in collaboration and interdependence between conservation actors. For example, NEZS lacked the regional and local working culture and knowledge which was contributed by ESI and the technical expertise and funds required by ESI was provided by NEZS. The project managers have limited on-the-ground knowledge of local culture and politics and this was taken care of by local field staffs. Both project managers and staff worked within a specified funder-implementer structure which promoted collaboration through affirmative policies such as skill building and exposure visits.

Conservation as a day-to-day affair steered through the intra-community conflicts, which at times were identity based (class and tribal) and sometimes they compounded over new conflicts created unintentionally. Examples include tensions related to spotlight distribution and maintenance of solar fencing or various degrees of collaborations or non-participation within the community. This conflict often manifested itself as non-co-operative behaviour from the community.

The 'Other' Outcomes

The project managers deemed the project successful because of the effectiveness of the interventions resulting in reducing conflicts and creating a successful low-cost community-based model of conflict mitigation. Apart from these direct impacts, there were some 'other' outcomes, mostly intangible in nature. These outcomes were mostly unintended and resulted from everyday interaction among different actors.

Availability and accessibility to critical information was found to be the backbone of these interactions, especially between project members and the local community. Periodic meetings on project implementation helped to bring clarity of plans, roles, responsibilities and costs and benefits of participation. The community perceived the project proponents as transparent and accountable and this facilitated collaboration. During conflict situations, such positive perception helped in creating spaces for further dialogues and ultimately either defusing the tension or converting conflict into collaborations. Few community members and project staff retained certain technical information such as compensation mechanism, equipment maintenance, farming of new crops or vaccination schedule of livestock. Members with such information were perceived by villagers as being knowledgeable and powerful. Thus, controlling information became intentional or unintentional tool of power capture in the project area.

Traditionally, the government had not been effective in addressing the issue of human-elephant conflict in Goalpara which created a significant resentment against the forest department. As the conservation project came into existence, it provided a new hope to people. Although the project managers saw the community as equal partners, we found that the community perceived them as patrons and

themselves as beneficiaries of development. Thus, the NGO became a para-government in people's perception. Even during a community-based fence monitoring event, some community members addressed the project staff as 'hathir maalik' (owner of elephants). Such connotations have been generally reserved for government agencies in areas with human-elephant conflict. While the attitude of the villagers towards NGO was positive, it increased the burden of expectation on the NGO. The NGO had to shed this burden through more dialogue with the community.

The socially influential members of the village and the project staff who belonged to the affected villages became mediating voices between the project proponents and the community. Much of the effective interactions, collaborations and conflict resolution were the outcomes of these individuals whose contributions helped the project on everyday-basis and is termed as 'street-level bureaucrats' (Jackson 1997; Mosse 2004). Similar to Mosse's (2004) observation of field workers in an internationally-funded development project in Central India, we found that the local project staff were problem solvers, product suppliers (for conflict mitigation and livelihood generation), experts and influential people with connections (with urban project managers, government department officials). They were treated as elites in the area. Asserting the importance of project staff in the area, one of them stated that they were the 'indispensable' part of the project and the project would suffer if they leave or were transferred from the area without training the next set of staffs. This assertion was probably true as we found that community was reluctant to rectify technical problems related to the fence (battery faults, short circuits and even dust deposition on solar panels) until it was first examined by the project staff.

Drawing from Long (2004), Mosse (2004), Brechin et al. (2002) and our work, we can say that rather than being an execution of already-specified plan of linear actions, conservation is negotiated on everyday basis. The socially constructed process which involves a set of actors with both divergent and conflicting agendas and their daily interactions shape conservation. On asking whether AHP could ever wind up its work in Goalpara, the project manager in Guwahati said that it would not be possible even when if the funds decline. It is less likely that the crisis of human-elephant conflict will decrease as the habitat continues to disintegrate pushing elephants closer to the human settlements. Such conflicts will only compound existing human vulnerabilities reducing the resilience of the community. Therefore, such conservation and development projects like AHP will always be in demand making conservation projects in such landscapes a permanent feature comprising of collaborative and competitive everyday-interactions among various actors.

Everyday-Conservation

The detailed portrayal of different conservation actors, discussion on modes of interactions among these actors and description of hidden and unintended outcomes of conservation process in section 4.2 leads to an alternative pathway to understand wildlife conservation. The constant 'on-ground' interactions among the members of the project and the local community constitute 'Everyday-Conservation' which we claim is the underlying force that makes conservation work. 'Everyday-Conservation' deals with the issues of concerns, care, conflicts, negotiations, barriers and opportunities which conservationists, local communities and other stakeholders experience frequently. While the larger aim of conservation is to preserve wildlife, resolve or minimize conflict, in this paper, we examined the ways by which conservation actors perceive conservation and kinds of social processes that are produced on a day-to-day basis that build conservation.

Within a social context, Everyday-Conservation focuses on social interactions and networks from micro-perspective that influence patterns of daily life. Negotiation was the initial step, followed by collaboration that was readily seen between international and regional project proponents and between project managers and project staffs. Interaction with the local community involved collaboration, negotiation and conflict. These were handled by project staff and targeted socially influential people on an everyday-basis. Rather than the stated policies, the conservation project was shaped by these daily interactions among the actors and this is what we call 'Everyday-Conservation' that conditions the functioning and the outcomes of a project in a large way.

We reiterate that we should pay equal or more attention to the practices and processes of conservation along with the outcomes of conservation. We propose that long term ethnographic studies should be taken up for examining different conservation models in India to understand what works and what does not work in conservation.

CHAPTER 7: From Obscurity to Popularity: Two stories of bird conservation from Northeast India 18

Abstract

This paper discusses how competing value systems of different interest groups, help the obscure and lesser known species to become a part of a global conservation project. We analyse two community-based conservation initiatives where two little-known bird species Bugun liocichla (Liocichla bugunorum) and Amur falcon (Falco amurensis) have transformed the state of the landscape with a series of initiatives by Governments, NGOs and scientists. Bugun is found in only one location of Arunachal Pradesh and its population is currently as low as 14 individuals. Amur is a migratory bird of prey that visits Nagaland in millions to roost for two months. This paper particularly, focuses on how the idea of conservation NGOs is introduced at the community level and how particular bird species gain popularity, locally and internationally. Using the notion of value, we examine how and why species gain specific value/s when the conservation projects are designed and implemented in community-based conservation projects in Northeast India. Based on ethnographic research, we have used semi-structured interviews and participant observation to gather information from key informants. We found that these bird species attain specific cultural, commercial and conservation values depending on various ecological, economic and social factors. In the process of conservation, the birds also become 'development' icons for the landscape. We argue that the two species have attained a 'universal value' attuned to the philosophies of global capitalist market and global conservation.

Introduction

Biodiversity conservation has seen a remarkable shift in its orientation by the integration of social scientists and their ideas. Inclusion of social sciences and local people's views in biodiversity conservation has altered the way species are perceived. Different worldviews about a particular species can neither be exclusive to each other nor fused into one single value system. Instead, species should be viewed as an assemblage of social, economic, philosophical, scientific and aesthetic values.

People hold different values to species, from intrinsic to instrumental (Dietz et al., 2005). Conservation biologists believe that species have value in themselves, a value neither conferred not revocable, but is a result of a long evolutionary process (Soule 1985). While some believe that humans

 $^{^{\}rm 18}$ Submitted to Geojournal. Authors: Ambika Aiyadurai, Sayan Banerjee

should conserve biodiversity for its own sake as it has an intrinsic value, while others claim that humans must protect species because of their utilitarian or instrumental value. Therefore, identifying which species to conserve depends on who are the interest groups and henceforth, what values are assigned to the species.

In this paper, we argue that certain values can be constructed around a species to make it worthy of conservation, in order to gain local and global support. This paper discusses two case studies of two lesser-known bird species (1) *Bugun:* The bird and the tribe around Eaglenest Wildlife Sanctuary. Bugun is found in only one location of Arunachal Pradesh and its population is currently as low as 14 individuals (2) Amur Falcon: Making of a 'avian-celebrity' in conservation. Amur is a migratory bird of prey that visits Nagaland in millions to roost for two months. Bugun and Amur have transformed the state of the landscape with a series of initiatives by Governments, NGOs and scientists. These birds rose to lime light and became a part of global conservation projects in Arunachal Pradesh and Nagaland (Northeast India). We claim that these birds carry different values and meanings, which play a key role in the 'making' of iconic species and transforming the habitat for global conservation.

We start the paper by discussing three kinds of values that the species are attributed with (cultural, conservation, commercial). Secondly, we provide two case studies to demonstrate how different groups of people, attribute value to these birds. Finally, we show that these values have the capacity to transform these obscure species into a 'celebrity' species. These birds shift between values to gain a 'universal' value which is acknowledged by the locals, nationals and international conservation groups. As this paper is based on bird conservation, we use the term birds, wildlife and species interchangeably.

Values and biodiversity conservation

We put forward three systems of values associated with biodiversity conservation, namely, cultural, conservation and commercial value. Although we will discuss these three values separately, their use by particular interest groups is not mutually exclusive and could be perceived as an assemblage of all these values.

Cultural value

Multiple values are attached to species that range from utilitarianism to symbolism. Some species are revered as a kin and sometimes as a pest, depending on socio-cultural factors. For indigenous people, who have been living near and in the forests for generations, they find some species as culturally important for various reasons. The local environment is not only a source of food, commerce and other life choices, but also carries symbolic meanings (Robinson & Redford 1991; Knight 2004). Many species are considered

closely related to humans and to have cultural, pragmatic and symbolic meanings (Aiyadurai, 2012; Tidemann and Gosler, 2010). Biologists see their study animals as research subjects, whereas, species displayed in zoos are for gazing, in circuses for entertainment and in the domestic spaces, as companions and/or pets (Knight 2004; Manning and Serpell 1994; Milton 2002).

Conservation value

Factors such as rarity of the species, conservation status and threatened habitats help build a set of values for particular species, which can be termed as conservation value. Rare and threatened species are particularly important for conservationists, who design and implement conservation and awareness campaigns. Such species have the capacity to garner public attention, influence attitudes and behaviour of general public towards conservation. 'Endangered', 'critically endangered' or 'threatened' species are terms attached to species and some fall under the high conservation value, seeking urgent attention. IUCN maintains a record of all species (mammals, birds, insects, fishes, plants) with their conservation status. Rarity is a very important parameter in today's conservation. According to Dooren (2014: 2), conservation today is grounded in two key criteria: rarity and nativity. Similarly, species with charismatic features of the species help in gaining conservation support, as Lorimer (2006) points out that 'non-human charisma is vital for such political and economic endeavours. New discoveries and high levels of endemism also add to the conservation value making a compelling case for species conservation.

Conservation can be seen as a form of social movement (Jepson and Canney, 2003) where certain values are introduced to the native populations by external actors. When new conservation projects are implemented, especially in remote areas such as the Northeast India, conservation sites become 'meeting spaces for researchers, local residents, NGOs and the state that produce cross-cultural encounters' (Tsing, *et al.* 2005). These spaces also become an arena for discussions, negotiations, promises and compromises where actors agree or disagree to the ideas offered by these powerful actors (Affif and Lowe, 2008). During these encounters, old ideas about species give way to new ones; brought in by conservation projects and new values are attributed to the species, sometimes overriding the locally existing values.

Commercial value

In addition to the local peoples' perceptions and how conservationists value species, markets play an important role that assign commercial value and transforming species to 'commodities'. Claims to fix environmental problems through the market-based solutions are prevalent in the form of ecotourism, payment for environmental services and carbon trading but scholars raise questions on the processes and outcomes of neoliberal conservation (Fletcher 2010; Buscher, *et al.* 2014). Commoditization of nature and its natural resources advocate tagging a species or elements of nature with a dollar price for capital creation. This is often carried out in partnership with pro-profit organizations that disregard local cultural values and its uses. This belief rationalizes the notion that in order 'to save, nature has to be sold' (McAfee 1999: 97). For example, ecotourism is known to target new frontiers where nature can be packaged and marketed for consumption of the middle-class across the world (Fletcher and Katja 2012).

For species, their commercial value in combination with high conservation value, has the potential to appeal to a larger population, especially if it is a charismatic species. But, how do conservationists design projects around a lesser-known species? In order to understand, we shall now discuss two cases of bird conservation from Northeast India would help throw some light on this.

Bugun: The bird and the tribe around Eaglenest Wildlife Sanctuary

Respondent: 'You have done great work. Due to this bird, our 'Bugun' name has got so many acknowledgements'.

Researcher: You realise what will happen if you let this bird go extinct! Your name will be tarnished.

Respondent: Yes! That is true.

This is a conversation between a villager and a researcher¹⁹ in one of India's remotest regions, Arunachal Pradesh. The villager is a member of an indigenous group known as Bugun (also known as Khowa), with a population of around 1,432 in West Kameng district of Arunachal Pradesh. The term 'Bugun' became very popular among the naturalists when this tiny bird was discovered in 2006 (Athreya, 2006). Measuring just 22 cm and weighing a few grams, the bird created a stir among the bird watching community. The discoverer, an astrophysicist and an amateur birdwatcher named this bird Bugun Liocichla (*Liocichla bugunorum*) after the local community, Bugun.

¹⁹ An avid bird-specialist and faculty in an academic institution in India

"In 1995, I was not even sure what I had seen. I knew I saw something which I have not seen before; I knew I saw something which was not in the book..... I came back to Eaglenest in 2003. I had no expectation that I would find a new bird there.... Accidentally in 2005 we found this bird and described it. We named it after the local tribe for their indigenous conservation ethics." - RA (19 Jan 2018, Tezpur)

IUCN²⁰ status of this bird is critically endangered²¹. It is not listed in the Indian Wild Life Protection Act, 1972 but babblers, in general are listed under Schedule IV²². Known to be found only in seven pairs and seen at an altitude of 2000m, the bird is currently known from just one location (Singchung Bugun Community Forest²³ near Eaglenest Wildlife Sanctuary (EWS). This community forest was awarded India Biodiversity Award for its efforts to conserve the critically endangered bird in 2018 (Goswami 2018).

Unlike other charismatic species such as hornbills and eagles which play an important role in the local mythology, customs and in the material culture of the local communities²⁴, Bugun species did not seem to have such connection with the local customs. In fact, the local community was initially indifferent towards this bird. According to RA, "the community did not even know that such a bird existed. The bird is too small and too rare. When we showed the photos, they did not recognize it." Locally, there is no name for this bird. A local resident recollects that "…in our childhood, the forest used to be so close to our village. We used to hunt. But I had never seen this bird. I doubt if anyone else has seen either. When RA played the audio of the bird call, we recognized the call. But we could not remember how it looks."

For the community, the association with the bird began when it became the mascot for ecotourism in 2006. The initiatives by conservationists and Bugun Welfare Society (a local NGO) played an active role in popularising this bird. The local people took great pride that the newly discovered bird was named after the community. Pride is one of the crucial factors to generate a positive perception towards the bird as well as towards the tourism initiatives. Many respondents were happy and proud that their tribe's name is now known globally because of this bird.

The news of this bird was covered in all major ornithology magazines and the news took the media by storm (Collar and Pilgrim 2007). Birdlife International (2006) stated that a professional astronomer has made

²⁰ International Union for Conservation of Nature and Natural Resources (IUCN) is the world's oldest and largest global environmental organization, with around 1300 government and NGO members in 185 countries.

²¹ Categorized by IUCN as facing an extremely high risk of extinction in the wild. Majority of the population21 live in just two villages, Singchung and Wanghoo (Census 2011). In Singchung village, people follow Mahayana Buddhism, but Christianity is also on a rise. In addition to farming, Buguns also work in the construction of local infrastructure, rear Mithun21, run small shops and trade in the nearby Tenga town.

²² The Indian Wildlife Protection Act (1972) has a list of schedule of protected species. Schedule I & II have absolute protection with severe penalties if found convicted. Schedule III & IV species are also protected, but penalties are much lower. Schedule V species may be hunted if declared as pest and dangerous by the officials.

²³ In Northeast India, large tracts of forest are *de facto* controlled by local communities as per their customary laws. The state does not have any ownership or control over them.

²⁴ Nagas use hornbill feathers, wild boar incisors and bear skins in their headgear and Nyishis use macaque fur as machete cover.

the most sensational ornithological discovery in India for more than half a century. The discovery of this new bird generated a series of conservation initiatives involving local communities and biologists that included setting up of an eco-tourism programme. The local community were at first apprehensive of what tourism could bring because of the remoteness and the isolation of their village²⁵ but more than that the local people did not believe that "anyone would pay money to see birds," (Banerjee, 2012). RA who initiated organised bird-watching tours said,

"I ran my first bird tour, largely to demonstrate to Buguns. They were ready, but they were in doubt if people from outside will come and pay to watch birds. So I had to convince them that it makes sense... The April, 2004 tour was successful in spite of logistical hurdles; the visitors spotted over 300 species of birds and it was demonstrated to the Buguns that tourism can be done."

EWS soon became the 'hottest birding spot in India' (Grewal 2009). It provided some employment to the local youth and it got reputation among international birding community. Tourists are offered a ten-day birding tours that covered Bhalukpong, Sessa and Eaglenest. Other birding routes such as Dirang, Mandla-Phudung, Tawang or even Kaziranga are also added if the tourists choose to pay more. On an average, tourists pay close to Rs. 30,000-35,000 (\$460-\$540) for a 10-day trip. According to RA, this is half the price what Bhutan offers with similar array of bird species.

The presence of the bird has helped to develop an avian tourism and conservation in and around EWS. A large hoarding stands outside the sanctuary with information about the basic ecology and the conservation importance of the species. Such visual installations create a new sense of awareness about the bird among the local community. Funding by Rufford Foundation²⁶ helped in the research of this bird and on other species. In 2011, RA was conferred with prestigious Whitley award²⁷ for 'forging alliances with Himalayan tribal communities for wildlife security management, Arunachal Pradesh, India' (TNN, 2011). A postage stamp was released by the Government of Arunachal Pradesh in 2012 in the honour of *Bugun Liocichla* (IISERPUNENEWS, 2013).

"For me, the thing about Eaglenest is huge number of birds, really good forest and wonderful accessibility across 2800 metres. The Bugun Liocichla was an accidental benefit which I made sure to get the most out of it. I shocked quite a few

²⁵ The nearest airport to Singchung is 300 km away in Guwahati, the capital of Assam. Indian citizens from states other than Arunachal Pradesh and international tourists require an 'Inner Line Permit' to visit Arunachal Pradesh.

²⁶ The Rufford Foundation, a UK registered charity, funds nature conservation projects in the developing world.

²⁷ Whitley awards are given annually by the Whitley Fund for Nature to recognize effective conservation leaders across the globe. Also called the 'Green Oscars', the award is the most high profile of conservation awards.

people when I said if I have to barter Liocichla with 100 years of security for the landscape, I will do it. There will be no hesitation. The bird is just a tool, a symbol, a mascot. The real goal was always Eaglenest; regardless the role Liocichla has played in my life." – RA (19 Jan 2018)

The bird clearly became the icon for not just the conservation of the species but for the overall landscape. High level of rarity and endemism of the bird, combined with interest from naturalists, created a niche market for avian-tourism at EWS.

Amur Falcon: Making of a 'avian-celebrity' in conservation

There is something unusual about the village Pangti in Nagaland. One would find posters of a bird at house-doors and hoardings along the road with messages of bird conservation. It is here, in 2013, that a high profile Amur Falcon Conservation Project unfolded. Pangti²⁸ was part of a sensational documentary²⁹ on Amur Falcon. A bird that was heavily hunted has become a 'conservation celebrity'. The local people, conservation NGOs and bird researchers took pride and pledged to protect the bird.

Villagers at Pangti are largely cultivators (both shifting and settled) and after the construction of Doyang hydroelectric project in 2003, a reservoir³⁰ was created which drastically altered the landscape both ecologically and socio-economically. Many villagers shifted to fishing as the reservoir provided them with plenty of catch. The reservoir, not only attracted fishermen but, also attracted falcons making this a temporary stop-over home for falcons from October to November. A migratory raptor, with a size close to pigeon, Amur Falcons³¹ visit Pangti in large numbers³² every year from Mongolia and South Africa with a stop-over at Pangti. The site has become a 'bottleneck site' for feeding and resting for more than a million falcons (Kasambe 2014). Taking the opportunity, villagers began hunting these birds and earning around Rs. 40,000-50,000 (\$650-\$750) in two months. This is a huge income to earn in a place with no other livelihood options. Villagers considered these birds as gifts from God.

The conservation program began in 2013 as a result of a video documentary (The Amur Falcon Massacre), highlighting the hunting of Amur Falcons by the local residents of Pangti. The mass-trapping of the bird and the graphic images were sure to draw attention from the conservation community. Hunting of

²⁸ Pangti is the largest village for the Lotha tribe in the Wokha district of Nagaland.

²⁹ Documentary titled 'The Amur Falcon Massacre' was broadcasted in 2012. Bano Haralu, a journalist and a film maker from Nagaland, along with a conservation advocacy group took up the cause of protecting the falcons.

³⁰ Doyang river is a tributary of the Brahmaputra, 26 km from Wokha town.

³¹ Amur Falcon weighing 160-200 gram and are one of the 15 species of raptors found in India. The birds are known for their trans-equatorial migration from Mongolia and Eastern China to Southern Africa and back every year (Bildstein, 2006). The Indian Wildlife Protection Law does not specifically mention this bird in any schedule and IUCN lists this as Least Concern species.

³² The global population of the species is estimated to be 1,000,000 birds (BirdLife International 2018). Around 12,000 – 14,000 falcons were reported to be hunted in the area for consumption and commercial sale every day during the peak season.

Amur became the headline in the several newspapers. According to one headline, "Indian 'massacre' of protected Amur falcon is killing at least 120,000 every year" (TheSiberianTimes 2012). This story was also reported in all leading popular magazines titled 'Shocking Amur Falcon Massacre in Nagaland' (Dalvi and Sreenivasan 2012), 'Pictures: Falcon Massacre uncovered in India' (NationalGeographic 2012). The images and the news articles, along with the engagement of civil society gave birth to a new conservation project.

Research on Amur began in the same year with satellite tagging of the birds, an initiative by the Ministry of Environment and Forests (MoEF), Wildlife Institute of India 33, Convention on Migratory Species Office (CMS), United Nations Environment Programme (UNEP), and the Nagaland Forest Department. Conservation India 4 (CI) became an important partner in the conservation of falcons which along with Nagaland Wildlife and Biodiversity Conservation Trust (NWBCT) which helped set up community organizations such as 'Friends of the Amur Falcon'. Eco-clubs in several schools were set up and interactive reading material was developed including the issuing of an 'Amur Ambassador' Passport to children to recognize their commitment to protect falcons. Bombay Natural History Society (BNHS) advocated with the MoEF to persuade the Nagaland Forest Department to initiate a 'No-hunting' order (CSO/1/GEN/2013) dated 12 June 2013. The order quotes, 'All the villages are responsible for conservation for ecological environment and wildlife preservation within their village jurisdiction.....various grants and assistance to villages that indulge in rampant killing and massacre of Amur falcon will be reviewed by the Government and if required the sanctions for the villages will be curtailed.'

An online petition by a citizen was sent to the Ministry of Environment and Forests (MoEF) to stop the killing (Change.org 2012). The active involvement of local and national NGOs played a crucial role in engaging various sections of the local community, including support from the politicians and local leaders. The Chief Minister of Nagaland Neiphiu Rio requested the people of Pangti to regard these birds as guests and to let them pass through the area unharmed as a true gesture of Naga hospitality. In one of his speeches³⁵ he said, 'We are a broadly educated society...we are no more primitive and we can do without killing these beautiful animals. We can survive'. Local authorities retrieved the nets, released the captured birds and the sale of falcons was stopped, and arrests were made (Lawrence 2013).

Though hunting is part of the socio-cultural traditions of Naga tribes, the images of dead birds carried by Naga men brought a sense of 'shame' to the entire community. The village council³⁶ was also under pressure to revive the fallen image of the village and their community in the nation and international media.

³³ A premier research institute tagged falcons with rings to study their movements and to map their migratory routes.

³⁴ A non-profit, non-commercial portal aims to facilitate nature conservation by providing information and the tools for awareness campaign.

³⁵ Recorded from the documentary.

³⁶ Constitutionally, Nagaland has been given special provision through Article 371A and the Pangti village council is the elected administrative unit. Apart from the council, there are other institutions, which dictate the way of life, such as the church, women's association and various youth groups.

The negative publicity by the media, initiatives by the government, NGOs, local communities resulted in 'giving up' of hunting in 2013. Conservation efforts by NGOs and active support of the village institutions had a strong impact that helped build a brand around 'this bird' – like a celebrity. Amur falcon became a mascot and the face of this conservation project. The media hailed these 'hunter-turned conservationists' working for a new hope in Nagaland as no falcons were reported to be hunted till date since 2013 (Boyes 2013; Sinha 2014; Dale 2018).

People took pride and ownership of falcon conservation (Haralu & Sreenivasan, 2016). A monolith to commemorate the Amur Falcon movement was installed in 2016 that mentions, 'We erect this monolith to commemorate the declaration of Pangti of Nagaland as falcon capital of the world'. 'Green Goal' football match was held to promote wildlife conservation in the state. Thus, many factors shaped people's acceptance of the decision of not hunting the birds: hoping for development, image building of the local community at the national and international arena, and fear of enforcement and above of all, loyalty towards village council regulations.

Discussion

Charismatic species are known to get far more attention, affection and funding than others (Lorimer 2006). Therefore, conservation projects are often blamed for being biased towards charismatic and magnificent species, ignoring and neglecting the less-known species. For example, studies on sponsorship in New Zealand shows that public attention and willing to pay for bird conservation is higher for relatively larger birds (Bennett, *et al.* 2015). According to us, obscure animals or plants in a remote place, such as northeast India have less hope of getting conservation attention, even if it may be genetically distinct and contribute significantly to an ecosystem, than a charismatic species. Bugun and Amur are hailed as 'successful' in conservation narratives and there is effective engagement of the local communities. These sites have also become globally well-known in the ornithological circles.

The starting point for both the projects was the role of highly motivated individuals (an astrophysicist and a television reporter). The beginning of the project was a result of an important 'trigger' event; one is the discovery of Bugun and the other the news of the heavy hunting of the falcon. Both projects aimed at conserving the species, educating the local people, creating a sense of ownership, and garnering a sense of pride among the locals in order to change people's behaviour and therefore protect the birds.

Gaining cultural value

Indigenous communities sharing their space with wildlife, for generations often have specific positive cultural connotations to a species, which helps in long term survival of the species. Among Guaja (South America), Idu Mishmi (Northeast India) the monkey and the tiger respectively are considered as a kin (Aiyadurai 2016; Cormier 2003). Tigers are also seen as kin among the indegenous people of Nepal (Hardman 2000). Among the Nayakas of South India, forests are viewed as parents who unconditionally provide food, which Bird-David (1990), calls the 'giving environment', and people as children of the forests.

In the present study, both Bugun and Amur did not seem to have any particular cultural value, other than having a direct utilitarian value in the form of food or to be sold in the markets (e.g. falcons). Thus, conservation of these species required massive awareness programmes, through which values about conservation could be inculcated in peoples' imaginations. 'Advertising these birds' was important to spread the message of conservation. Branding the focal species as ambassadors and making a logo of the bird (e.g. Friends of Amur Falcon, stamp of Bugun) provided visual identity to the conservation efforts that helped local community to feel connected to the bird. People took ownership of the bird by naming their community organisations and eco-clubs after the bird, for example 'Friends of Falcon' and 'Amur Falcon Roosting Area Union'. These initiatives created an emotional connection between local people and the birds. Calendars, t-shirts, posters, caps, stickers, and banners with images of these birds gave a sense of solidarity, pride and motivation to take part in conservation efforts. NGOs actively promoted the conservation's mission and goals on the social media and online portals. Thus, within few years, both the birds seem to have become integral part of the local culture now.

Gaining conservation value

Local advocacy, public interest and emotions are easily kindled if the species are rare and endemic (Ainsworth, *et al.* 2018). Such species with small population appear in the endangered list of IUCN red list and capture the attention of the conservationists. Some species also gain status as umbrella species³⁷ and keystone species³⁸ that facilitate conservation (Mills, *et al.* 1993; Simberloff 1998). As icons of conservation projects, they play a central role in creating awareness and fundraising.

Initially, very little ecological information was known about both Bugun and Amur. Later, both gained conservation value through the scientific studies. Scientific information about these birds shed light on their vulnerability, their numbers and the risks these birds face. Role of science gave credibility to campaigns and awareness programmes. Having science-based information not only helped in convincing the

³⁷ Protection of these species indirectly protects other species that are part of the habitat and give refuge to many other smaller species, which otherwise go unnoticed.

Species those who have a disproportionately large effect on its environment and plays a critical role in maintaining the structure of an ecological community.

policy makers to offer their support but also gained in receiving public sympathy for the species, making the birds worthy of conservation and financial investment.

Gaining commercial value

Interestingly, these two birds gained value for commercial reasons. For example, EWS has become an important avian-tourism site for 'advanced' bird-watchers from within and outside India. Ecotourism is considered as an effective way to create 'green' livelihood for local employment and also to conserve the birds. As a driving force for both economic development and wildlife conservation, ecotourism is one of fast growing industries in the developing countries. A unique kind of 'bird-based tourism' or 'avian tourism' has developed in Eaglenest and Pangti, with a conscious effort to offer high-end niche tourism, so that it does not adversely affect the landscape while providing local livelihoods. The higher costs associated with this form of tourism meant that only serious birding groups could visit. Presently, the tourism is growing and due to social media, the news of this place is spreading.

Bugun Liocichla and Amur falcon as 'development' birds

In both the sites, birds are constantly attributed with different values depending on who claims these birds and for what purposes. Interestingly, both these birds become a point of contestations during a discussion on development. When a proposal was made to widen the road in EWS, the local influential people, forest officials and researchers were concerned about the Bugun and that it would hamper the tourism initiatives. However, the opinions were divided between those who wanted the road, as it would reduce the travel time for tourists and local residents and also boost the local economy, while others, argued that the road would destroy the habitat of Bugun. Finally, road was widened up to a point but not allowing the road to be constructed inside the sanctuary. Such discussions would not have been possible without the campaigns and conservation efforts. The birds, therefore, carry a sort of 'developmental' value seen during the debate on the road construction. Among the Buguns, the bird was seen as a symbol through which 'development' of the remote landscape was possible but at the same time, some groups felt that the very development can destroy the bird's habitat. While the conservationists thought of the bird as a tool for larger landscape protection, the local community in Pangti thought this bird would bring 'development'. Thus, they were seen through the lens of a 'development' value which emerged from the assemblage of cultural-conservation-commercial values.

As discussed before, villagers at Pangti were very apprehensive of the decision of banning the hunting of falcons, for the fear of losing a significant source of income and their access rights to the roosting area. But, due to involvement of several NGOs and Government departments, local people expected that the

development would arrive riding on this bird. One villager said, "The motivation is development. That is why we are protecting this bird. We are chasing for development. We have asked for road development, ecotourism, and guest houses and so on. Let's see what happens." Villagers contacted tourism department to build infrastructure but that did not materialise beyond building watchtowers. Although there was an increase in the number of tourists, it benefited not more than 50 individuals who were engaged as patrolling scouts, guides, boatmen and homestay owners. Majority of the affected people have lost hope for development and given the dire need for livelihood, they even want to return back to hunting.

West (2006) has argued that local communities often participate in conservation project with a view that conservation is a form of development that would bring in roads and schools. From the local communities' point of view, conservation brings benefits such as health care, additional sources of income and employment opportunities (tour guides, research assistants, porters). Many NGOs also organise activities to support schools and hospitals to gain the good will of the local community. In our case, the local communities saw a 'developmental value' in conserving the bird. We argue that biodiversity conservation is not necessarily against development but can be seen as a form of new 'development' using West (2006)'s phrase 'conservation-as-development³⁹'

Conclusion

We demonstrated how the two bird species that are lesser-known, gained prominence to become an important species for conservation. Factors that helped the species to become famous are not only ecological but social, personal, cultural, emotional and economical.

These birds have come to occupy a crucial place in people's imagination, not only among the local communities but also in the lives of bird-watchers and other interest groups. Though these birds were hunted for utilitarian purposes, they now carry a new meaning for the local communities, giving rise to new ways through which local people connect to these birds. The presence of these birds also appeals to a great extent to the growing middle class (eco-tourists, birdwatchers, NGOs and wildlife enthusiasts). We argued that culmination of these values creates a 'universal value' that both Bugun and Amur now carry. This 'universal value' indicates that the birds belong to the global community now and those who can afford, can visit these sites, regardless of where they are located, can invest care, finance and time to protect the species and their habitats. Transcending the barriers of different cultures and disciplines, these birds attain a 'universal value'. Such a value originates from global conservation philosophy and global capitalism. The role of media,

³⁹ 'Conservation is our Government Now: Political Ecology of Papua New Guinea'. In this book West shows that when NGOs interacted with the local people about conservation, people thought of 'earning cash' and participating in the market, so that they can have access to material goods. Local people were trained to do small businesses, to work with biologists (as wage labourers, guides, porters) and for monitoring the wildlife population. The first two are related to development and later two are for conservation.

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CHAPTER 8: Concluding Remarks

This project aimed to understand biodiversity conservation in India, especially on community-based wildlife conservation projects where local people participated significantly. We conducted ethnographic fieldwork in three wildlife conservation project sites in Northeast India to understand modes of involvement of multiple actors and their interactions.

From our experience of ethnographic fieldwork at Northeast India, we found different modes of community involvement in the conservation projects. Although the sites differ socio-politically, when we studied the process of participation, we found some general patterns of participation. We found that a crisis at the project site is extremely important to legitimise conservation. External actors like NGOs and forest departments were agents of hope and harbinger of social change in these crisis situations. Effective conservation- related activities, mediating actors within the local community, additional income opportunity, intra-community dynamics negotiated community participation on everyday basis. For long term sustenance, funding, capability development, tangible results were found to be the key factors. Our results also show that the external actors and the local community are independent thinking-entities or epistemic communities with a specific agency. All the actors rationalised their actions on everyday-basis, depending upon the action of others. This resulted into multidirectional interactions which actually cultivated the 'conservation' as it is, rather than pre-defined policy guidelines. We term this as bottom-up nature of conservation as 'Everyday-Conservation'. We presented this interaction-based model as a new framework to understand conservation as a socio-political process rather than a combination of events and measurable outcomes. We argued that long term ethnographic understanding of conservation models in India is necessary to know what works and what does not. From our fieldwork, we also found how different actors perceive the focused species (elephants in Goalpara; Amur Falcon in Pangti; Bugun Liocichla and charismatic birds in EWS) and associate a number of values to them. These species carry cultural values (as Gods, guests, fellow beings), conservation values (as endangered, hunted, habitat-dependent, provider of ecosystem services) and commercial values (for ecotourism). We also found that people put developmental value on these species to negotiate their developmental aspirations with external forces based on existence of these species in their regions.

Combining our findings from the online survey and the fieldwork, we understood that conservation is context and place-specific. Rather than being models, each conservation experience is unique as the embedded interactions among the actors are unique.

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Appendix 1: Other papers presented as part of this project

Date	Conference	Title
19-20 March,	Society for	Effect of availability and access to information on
2018	Conservation Biology	local community's willingness to participate in
	Asia Section	community-based wildlife conservation projects.
	Conference	
27-30	Students' Conference	The 'Other' Outcomes of NGO Interventions in
September,	on Conservation	Human-Elephant Conflict Mitigation: Case of
2018	Science (SCCS)-	'Assam Hathi Project' in Goalpara, Assam.
	Bengaluru	

Appendix 2: Photographs



Fig. 1 Poster on Amur Falcon ecology and protection, pasted on a wall in Pangti



Fig. 2 Hoarding erected by village council and forest department at Pangti banning killing of Amur Falcon



Fig. 3 Plaque describing the Amur Falcon conservation story erected at Pangti by village council



Fig. 4 Board at Nature Interpretation centre near Eaglenest WLS describing the history, flora and fauna of the sanctuary



Fig. 5 Board near entrance of Eaglenest WLS describing the do's and don'ts at Singchung Bugun Village Community Reserve



Fig. 6 Board at Lama Camp, describing importance, attractions and other details of tourism of Singchung Bugun Village Community Reserve



Fig. 7 A schematic cartoon map of Eaglenest Wildlife Division hanged outside the nature interpretation centre, near the entrance of the sanctuary



Fig. 8 Searchlights provided in Assam Hathi Project by NGO to community to chase away elephants



Fig. 9 Hand outs in both English and Assamese on conflict mitigation strategies, published and distributed by NGO in Assam Hathi Project



Fig. 10 Solar electric fence erected by NGO with the help of the community at Goalpara in Assam Hathi Project



Fig. 11 Community based maintenance of solar electric fences at Kalyanpur village, Goalpara in Assam Hathi Project



Fig. 12 Community meeting convened by Assam Hathi Project field staff at Kalyanpur village, Goalpara to appraise community on how to maintain solar electric fence properly