ADAPTIVE MANAGEMENT PRACTICES IN THE GOVERNANCE OF CFR AREAS IN TATR BUFFER

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Abbreviations

TATR	Tadoba Andhari Tiger Reserve
CFR	Community Forest Reserve
MFP	Minor Forest Produce
FRA	Forest Rights Act
NTFP	Non-Timber Forest Produce
MoEFCC	Ministry of Environment Forests and Climate Change
ICT	Information and Communication Technology
FD	Forest Department
NGO	Non-Governmental Organization
JFMC	Joint Forest Management Committee

Executive summary of the Project

Adaptive Management is a term used for a strategy of implementing management actions in a step wise manner, where the impact of each action is evaluated and the learnings from positive impacts are integrated in the next actions for achieving specified objectives. It can be simply defined as 'learning by doing'. An adaptive management approach can be applied to wide range of projects.

Forest Rights Act (2006) including the provision of Community Forest Rights (CFR) brought a landmark change in forest management by recognizing the management rights of forest dwellers over forest resources. The scholarly research over FRA, is restricted to gaining of CFR but little is known about CFR management after the gain of rights by the community. Is the community able to manage the CFR area and gain better livelihood? How does the management system "learn" and "adapt" in the process of co-management? Present study addresses precisely these questions. The aspect of governance of CFR has not been studied in great details so far. Understanding conflicts before and after the grant of CFR is one part of the study and the conflict resolution methods applied and integrated in management study is the second part.

Our aim is to understand the process of evolution of adaptive Management practices in the governance of CFR areas in TATR buffer area along with the challenges faced and resolved by the community over the years.

The objectives of this study were:
1) Documentation of conflict resolution among various stakeholders of the forest   resource: Conflict resolutions within and between the CFR holders
2) Generalized model/framework of adaptive management practices which can get institutionalized: Identifying key learnings and devising a generalised framework as guidelines for other CFR areas

The idea of "conflict" and the definition was allowed to emerge from various interviews, formal and informal discussions, observations as this reflected the view of the people actually involved in the study. Qualitative methods were used for collecting information for this study. Stakeholders were listed. Secondary information about the CFR areas was collected and methods such as PRA (participatory approach methods), Semi Structured Interview (SSI), Focus Group Discussion (FGD), Expert's Consultation were used for getting primary information. Questionnaire and consent form were prepared after detailed discussion.

Three villages (Paachgao, Kondegao, Sitarampeth) in Chandrapur district of Maharashtra were selected for this study. Kondhegao and Sitarampeth are located in Bhadravati Tehsil and are located in the buffer of Tadoba Andhari Tiger Reserve which is an important Protected Areas Maharashtra. Paachgao in Gondpipari Tehsil of Chandrapur, Maharashtra. CFR of Paachgao village is the oldest, granted in 2012 while those of others were granted in 2016.

Some key questions were
1) What was the nature and frequency of conflicts over CFR areas?
2) How did the community deal with the conflict and was it through local democratic processes?
What are the relative roles of central agencies in preventing and mitigating the conflict?

Data analysis was along the following themes conflict between primary stakeholders, conflict between primary and secondary stakeholders and involvement of influencing groups in conflict and conflict resolution. A timeline is prepared to develop chronological sequence of various management steps, conflicts and resolution mechanism tried.

The number of conflicts over issues and over time are noted, and the way they are resolved, either internally or externally, through mediation or legislation etc are also noted. This is used later in offering a framework that can help early detection and prevention of the conflicts. Trans-disciplinary methods of study were used as they are designed specifically for community-based interventions. Analysing the scenarios and comparing between more mature CFR areas (like Pachgaon) and the newly granted CFRs was very useful to come up with the framework for all and also a tool of adaptive management that can help the CFR holders to achieve success.

Results

Conflicts are a characteristic of human society and appear in many forms. **In the preliminary discussions, the respondents were asked to define conflicts in their own words. The Marathi words used by respondents varied from "sangharsh" which is a direct translation of "conflict" to more nuanced "bhandan" (verbal disagreement), "vaad" "vadaavadi" (a discussion with opposing arguments), "matbhed" difference of opinions, 'maramari" (actual physical fight or a very strong disagreement). The word "sangharsh" is actually used only for more intense conflicts with institutions or systems involving group demonstrations or long-drawn ideological, procedural issues.** Field studies provided a very detailed, fine-scale understanding of conflicts from the perspective of community. Conflicts listed in standard literature on conflicts were noted from the study area. In addition to expressed conflicts, there are unexpressed or latent conflicts which can destabilize the management of CFR areas.

The conflicts over natural resources or forests are often described as community(vs.) outsider conflicts e.g., community vs forest department, community vs logging companies etc. However local communities are not necessarily homogenous and Agrawal and Gibson, (1999) have pointed out that different members of communities may have different interests in a conflict. In our analysis we have examined how conflicts differentially affect members of a community, exploring the various dynamics and interests that exist within communities. Based on detailed observations, discussions and review of various conflict situations, we identified two primary stakeholders in the CFR area as main "actors" that are commonly directly involved in conflicts CFR holders and government conservation agency which is forest department. Other actors are members of local community (village) who are not CFR holders.

Conflict between primary stakeholders is inevitable at all stages, but is highest till the grant of CFR. These continue later as well, in the management planning stage and implementation. Forest Department remains a regulating agency with higher legal power than the community. While CFR holders have more decision-making power in management than the forest department.

Secondary stakeholders are the traders and village population that does not participate in CFR directly. Their gains can vary with the management decisions, and that can lead to conflict as well. The other influencing groups among these are NGOs facilitating the CFR claims, environmental / wildlife organizations and politicians each with their own reasons for involving in the conflicts. The external agencies involved in conflict resolution are the law-and-order system in the form of police, state administration and judiciary. They are involved mainly in case very serious conflicts that require legal processes.

Gramsabha and Gram-panchayat have their own ways of functioning and although we were not given

actual instances of a gramsabha-grampanchayat conflict, but many agreed that this was a subtle conflict angle often encountered. The CFR holder community in this study is entirely tribal, sharing a common culture. However, the influencing groups, the other stakeholders (represented by NGO workers, Forest officials, traders etc.) are non-tribals. Although familiar with the local culture, they are still outsiders to the CFR holder group. As against this, CFR holders do have common cultural ties, very often are actually related to each other by blood or by marriage and hence have relations other than for the purpose of CFR. This may lead to some of the other social conflicts influencing CFR related relations, and vice versa.

Although class conflicts are note evident at present, they may arise due to later at the time of sharing of benefits. Gender is an important aspect to consider as women did not always participate equally in the gramsabha discussions. Exception was the Pachgao gramsabha, where women expressed certain concerns that indicate the gender dimension of CFR conflicts.

CFR conflicts emerged when the interests (economic or conservation interests) of primary stakeholders in CFR are threatened by the other primary or secondary stakeholder groups, or certain groups are excluded from benefits, or there is no agreement regarding actions to be taken for managing the CFR. The conflicts can have a positive impact, if the resolution leads to learning of all involved and creation of permanent mechanisms for better management. The interviews, documented accounts and group discussions led to a collection of conflict stories which are classified and analysed in the final report.

The report presents a typology of conflicts which can be used for future study. Each is illustrated by an example of conflict and a solution that followed. Space and time are important dimensions of the conflict. Conflict over demarcating the CFR is an important pre-cfr conflict. Conflicts can be short- and long-term basis. The conflicts before granting of CFR are mainly between the CFR claiming groups and Forest Department (representing government) and can be called as **Pre-CFR conflicts**. After CFR approval, conflicts with Forest Department continue although their triggers change and post-CFR conflicts emerge. Additionally, conflicts within the CFR holder group, those with non-CFR holders in village and adjacent villages may get triggered after the receipt of CFRs and they can have serious implications for regular management.

CFR provides for the transfer of Proprietory rights (- access, withdrawal, management and exclusion) from the forest department to the local community. This is always a problematic and long drawn procedure leading to Management Conflicts. Although forest department continues to be the owner of the land (thus retaining the right of alienation), it has to share the power for management decisions and is actually having less say in the matter than in the past, with the gramsabha being the decision maker.

Conflicts related to management rights are between Government/Forest department as the legal owner of the land vs. CFR holders as Proprietors gaining management rights.

Conflicts related to management actions are between the primary, secondary stakeholders and influencing groups- those having direct and indirect benefits from the CFR areas. These could be a process related conflicts and product related conflicts.

An interesting dimension to the conflict is the nature of resource and how it is understood by the stakeholders. (River, forest continuous, while boundaries of CFR) (wildlife habitat vs extractive use),

The conflicts can also be categorized based upon the intensity as low, moderate or high. The intensity can be judged by **cause** (the nature of disagreement that led to conflict) as well as by **effect** or impact (the outcome of the conflict).

This study is mainly looking at adaptive management. Hence, we have chosen to classify conflict intensity, not based on cause or effect, but based upon **conflict resolution**. Those conflicts, that could be resolved by the democratic procedures within the CFR committee itself are considered "Type 1" conflicts while those that cannot be resolved by the CFR committee and need external intervention, and sometimes even legal recourse are "Type 2" conflicts.

The main conflict situations are briefly described along with the actors. Conflict was triggered by a change in resource access as well as management and trade rights. Changes in the right to manage, trade NTFP and to make collective rules regarding exclusion led to conflict issues. CFR illustrates a special case of formal (legal) recognition of the customary claims by the State (Indian government) that is one of the causes of extreme unease in the forest bureaucracy.

Majority of the conflict situations are between Forest Department officials and CFR holders. They are also the highest risk/severe (Type 2) as they can endanger the CFR over the forest patch. Conflicts within the CFR holders range from Type 1 (low) to Type 2 (high). CFR holders have tried to find solutions to these issues in a democratic manner. External agencies may facilitate negotiations, while some may add fuel to the fire for personal gains.

A number of negative impacts were observed: anxiety and fear, disharmony and division within social groups, distrust and high economic and environmental costs. Some positive impacts seen were: – strengthening collective action and raising awareness of the need to address overlapping instances of customary and statutory claims in some cases. Conflict reiterated the importance of keeping records, process documentation, finance and accounting, developing plans of management, evolving a mechanism to deal with conflicts within the community and with other external agencies. There is an increase in the participation of women and acceptance from the other men leaders in the community and it will increase in future.

Case studies of selected conflict situations are provided for detailed understanding. Conflict resolution, as opposed to mere management or "settlement," points to an outcome that, in the view of the parties involved, is a permanent solution to the problem. We examined the conflict resolution processes in this study to learn of common patterns and identify if effective mechanisms can be created in future for these and other CFR holders in surrounding areas.

The findings from the studied cases suggest that while the causes of stakeholder conflicts are diverse, conflict of some form is highly likely when communities are granted access to the resource area which the forest department considered to be their own. Five out of ten conflict situations involved the two primary stakeholders, local community and forest bureaucracy, the actors being the CFR holders and forest officials. CFR, with its ideology of local communities holding having a "right" and not just "privileges" over the resource is against the top-down manner of functioning. Both actors view each other with suspicion and distrust which is a major barrier, which continues even after grant of CFR as can be seen from the various post-CFR conflicts. As long as the two primary stakeholders are antagonistic, and not united by a common cause or purpose, the conflicts do emerge in new forms. There is a need for intervention of government agencies (tribal department, revenue department) on behalf of the community, to help address the procedural and bureaucratic matters with forest department.

In case of Paachgao, the local community identified ways of making the various processes streamlined, fair and transparent. In the study area, the issue of wildlife in and outside of CFR area is a source of conservation conflicts. The solution to this has not yet been identified and the conflict is addressed as it comes. There needs to be external intervention in terms of wildlife management in this to avoid future problems.

The role of facilitator from outside has been important in addressing the conflicts within CFR holders in the early stages in all areas. In Paachgaon the community learnt how to self-regulate without allowing a rift to form. In some cases, the community conducted mediation between conflicting individuals through relatives, friends and used social capital, which has high value in a tribal group.

The key learnings and adaptive management that evolved were as follows:
a. Need of facilitator agencies
b. Inculcating a "gramsabha culture" in a village
c. Training of the department personnel towards identifying conflict issues and minimizing them without diluting the purpose of CFR.
D. need of grievance redressal system as well. Tribal welfare department and people in an attempt to understand each other's perspective are needed.

Chapter 1

Introduction

About Adaptive Management

Adaptive Management is a term used for a strategy of implementing management actions in a step wise manner, where the impact of each action is evaluated and the learnings from positive impacts are integrated in the next actions for achieving specified objectives.

Adaptive management is often referred to as structured 'learning by doing'. Adaptive management incorporates management actions into experiments, to compare the effectiveness of alternative management actions.

An adaptive management approach can be applied to projects of broad scope and spatial scale, such as region- or park-wide, and also to local small-scale projects such as single population management or park specific issues.

This approach has gained much importance in the understanding of natural resource management in recent years. The reason being the presence of "uncertainty" in an open natural ecological system where response of certain management action is not always possible to predict because of several complex interacting factors. A good example is of decades of "scientific forestry" practiced in India, (Guha, R. 1985). The system of forest felling and plantation of selected species and severe control of local resource use employed by Forest Department of India was based upon principles of scientific forestry developed in Europe and not adequately studied within a diverse tropical country like India. The disastrous effect of this on the natural forests of India, and on the indigenous communities dependent upon the ecosystem services of these forests is well researched (Guha, R. 1985). Loss of several important species, failure of plantations, spread of invasives are some of the negative ecological impacts together with negative social impacts such as impoverishment of forest dwelling communities and extreme conservation conflicts which have continued till today. Adaptive management approach is more appropriate for socio-ecological systems in India, where management needs to be a dynamic process integrating learning from the response of natural and social elements at every step.

Ecological work has mostly focused on the response of ecological systems to management actions. However, there is an equal or even more need to understand the response of social systems to the management actions and integrating key learnings from these in the management. Forest management policy in India has changed since the British period. Participatory management of forests was accepted through the idea of Joint Forest Management. But the forest department continued to dominate management decisions in forest lands, and has been a major stakeholder in economic gains emanating from forest produce. Landmark change in the governance of Indian forests was brought by the Forest Rights Act (2006) including the provision of Community Forest Rights. It recognized the management rights of forest dwellers over forest resources making them major decision makers and stakeholders in gains from the forest produce even though the ownership of the forest continues to be of the forest department.

About FRA

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights Act), 2006 (hereafter Forest Rights Act or FRA), came into force in 2008. It aspires to undo the "historic injustice" meted out to forest dependent communities by recognizing and vesting in them the rights to use, manage and conserve forest resources and to legally hold forest lands that they have been residing on and cultivating. The preamble of the Act recognizes forest dwellers as "integral" to the survival and sustainability of forest and their role in conservation of biodiversity. It also recognizes that insecure tenure and lack of established rights over forests have resulted in the marginalization

and displacement of forest dependent communities (Tatpati, M. (2015).

The FRA recognises a number of rights of forest dependent communities. Particularly empowering are provisions under Sec 3(1) of the Act which recognize the community forest rights (CFR) of the Gram Sabhas (GS)1 of forest dwelling communities. The right to protect, regenerate, conserve or manage any community forest resource (CFRe2) which they have been traditionally protecting and conserving for sustainable use, under Sec 3(1)(i) along with the above mentioned rights of the Act has the potential to change the top-down centralized style of governance of forests to enable greater site-specific management by communities, and provide collective livelihood security to communities, particularly when read with other provisions of the Act.

Sec 3 (1)(c) of FRA, vests the rights over collection and sale of Non-Timber Forest Produce (NTFP) i.e., Minor Forest Produce (MFP) as the Act refers to it, in the hands of communities. Vesting rights over commercially important MFP, which has been under the monopoly of state and contractors thus far, in the communities, has great significance. The Act clearly defines MFP in Section 2(i)) and provides elaborate guidelines under the Amendment Rules, 2012, for their sale, for a change in the transit permit regime, etc. Rule 16 of the Amendment Rules, 2012, provides for government schemes related to land improvement, land productivity, basic amenities and livelihood measures of various government departments to be provided to communities whose rights over CFR have been recognised, paving a way for convergence of governmental schemes towards village development, according to their own needs.

The implementation of CFR is riddled with many problems (Bandi, 2012). Only three per cent of minimum potential of Community Forest Rights had been achieved in India 10 years since enactment of the law (CFR-LA, 2016) The reasons for poor implementation are identified by the report as opposition by MoEFCC and forest bureaucracy, and constant opposition at the ground level, absence of political will, lack of effort to build capacity in the Central nodal agency and poor investment in implementation and its monitoring. It has been shown that the assertion of rights by organized communities, even where these are yet to be recognized formally, is changing the balance of power between communities, the forest bureaucracy and other state authorities (CFR-LA, P. Performance: Ten Years of the Forest Rights Act in India). It is thus not a smooth process to gain CFR and many claims have remained unsettled till now. The act and its provisions have been challenged in the court several times, including on the basis of constitutional validity of the act itself (Kohli, K., 2019).

CFR necessitates a strong role of community in decision making regarding forest. Doubts have been raised about competence of the community to make informed decisions about forest and opinions have been expressed that it should be done by trained personnel of forest department. (https://forestrightsact.com/court-cases/).

The scholarly research over FRA, particularly on gaining of CFR and its rights and livelihood linkages is available from many parts of India. It far outweighs research on actual management of CFR areas after the gain of rights by the community. Is the community able to manage the CFR area and gain better livelihood? What is the nature of interactions between major stakeholders in the forest resources? How does the management system "learn" and "adapt" in the process of co-management? And how does the new management system impact the resource sustainability? These questions are not yet fully addressed by researchers. It was felt that a study on these lines will help understand the CFR management and governance at local level in CFR villages. Learnings from this can help future management of CFR in other areas.

This report attempts to answer above research questions based upon field studies in three villages in Vidarbha region of Maharashtra. The implementation of CFR has been better in this region as

compared to other parts of Maharashtra. The nature of the questions requires some time to have passed after gaining CFR and this could be addressed by selecting 3 villages, one which received CFR in 2012, and others in 2016. The villages are adjacent to the TATR, a prominent National Park with growing tiger tourism. This leads to forest department being a strong force in the region, allowing us to understand the challenges of managing an area with two different (–and possibly contradictory) objectives for the major stakeholders: wildlife protection for the Forest Department and livelihood generation for the CFR holders.

TATR and CFR

Tadoba Andhari Tiger Reserve is Wildlife Sanctuary located in the central part of India in Chandrapur district of Maharashtra State. It is the oldest National Parks, created in the year 1955. The Tiger Reserve, created under Project Tiger in 1995, includes Tadoba National Park as the core and Andhari Wildlife Sanctuary, as the buffer.

1955	• Tadoba National Park (116.55 sp km)
1986	• Andhari Wildlife Sanctuary (508.85 sq km) was created
1995	• Tadoba Andhari Tiger Reserve created under Project Toger, settlement rights for TNP
1995	• Tadoba Andhari Tiger Reserve created under Project Toger, settlement rights for TNP
1997	• 30th April: Announced details of boundary for AWS • 9th June: A village called Wadala appealed regarding Nistar rights
2007	• 625.82 sq kms notified as Critical Toger Habitat under WLPA 2006
2010	• 1101.77 sq kms notified as the buffer under WLPA 2006

(Source: The Making of a Tiger Reserve: A Study of the Process of Notification of Tiger Reserves)

Our aim is to understand the process of evolution of adaptive Management practices in the governance of CFR areas in TATR buffer area along with the challenges faced and resolved by the community over the years.

The objectives of this study were:
1) Documentation of conflict resolution among various stakeholders of the forest   resource
    a. Conflict resolutions within the CFR holders (within the community)
    b. Conflict resolution between the right holders and other stakeholders (community vs. forest department, traders, other villages etc.)
2) Generalized model/framework of adaptive management practices which can get institutionalized
    a. Identifying key learnings from the selected CFR areas
    b. Devising a generalised framework as guidelines for other CFR areas based on key learnings

Literature Review

About Adaptive Management: The National Research Council (2004) defines adaptive management as: "flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood". Careful monitoring of these outcomes both advances scientific understanding and helps adjust policies or operations as part of an iterative learning process. Adaptive management, an approach for simultaneously managing and learning about natural resources, has been around for several decades. One of its earliest articulations in the natural resource's literature was by Beverton and Holt (1957), who described adaptive decision making in fisheries without calling it adaptive management. A generation later Holling (1978) and Walters and Hilborn (1978) provided the name and conceptual framework for adaptive resources management, and later still Walters (1986) gave a more complete technical treatment of adaptive decision making. In natural resources adaptive management simply refers to a structured process of learning by doing, and adapting based on what's learned (Walters and Holling, 1990). Lee's (1993) book expanded the context for adaptive management by providing a comprehensive exposition of its social and political dimensions. These pioneering efforts sparked an interest in adaptive management that has continued to grow up to the present time.

Williams (2011) presents a framework and definition for adaptive decision making, and to discuss some important challenges and opportunities for its application. His paper describes adaptive decision making in terms of a process with deliberative and iterative phases, with their sequential implementation over the timeframe of an application. In what follows the key elements and processes of adaptive decision making are highlighted and discussed in terms of this framework.

Learning in adaptive management occurs through the informative practice of management itself, with management strategy adjusted as understanding improves (Williams, B. K 2011).

About CFR

The concept of adaptive management above is well suited to understand the nature of management practices in a CFR area but has yet not been discussed in Indian context.

The basic issues and challenges in CFR management are well documented. The focus over the years has been on the processes started by the villages for obtaining CFR, the hurdles posed by conflicting legislations, ecological monitoring and management practices (Nayak 2001). Studies about implementation of FRA by Roy et al. (2008), Pathak Broome, et al. (2017), Springate-Bagins et al. (2020) include discussion on CFR implementation as a special case.

CFR areas and their implementation in Maharashtra has been documented in the Citizens report (2015). The case study of CFR management in Mendha Lekha and Pachgao villages in Vidarbha has been conducted by (Milind B, Goshta Mendha Gavachi, 2015 and Kahani pachgao chi, 2018). Mendha lekha is a village in Gadchiroli district, in Dhanora tehsil which is know for the fact that it's the first village who took all its decision by gramsabha and not by government. They exercised right to harvest Bamboo under Forest Rights Act. A number of villages from Gujarat, Chhattisgarh (Final report July 2011, United Nations Development Programme) some parts of Maharashtra (Tatpati, 2015), Karnataka and Odisha, where ownership rights over minor forest produce such as mahua, bamboo and tendu leaves created sustainable economies for the communities (Bokil Marathi book). Some of them have established potentially replicable models of successful implementation of CFR but Tatpati, (2015) states that comparative studies that analyse the factors that can potentially determine the success or failure of CFR are scanty.

The aspect of governance of CFR has not been studied in great details so far. CFR is a special case of participatory governance of forest. A general understanding of participatory governance of natural resources is available from studies by Vira & Jeffery (2001). Hellstrom, (2001) has pointed out that competition for resources, varied belief systems and other institutional factors can lead to conflicts over natural resources and pose a challenge to governance. The specific points of conflicts could be about the nature or quantity of resources to be extracted, access to different stakeholder groups, valuation of resources, management practices etc. These can be included in the "Biodiversity Conflicts" described by White et al. (2009) who propose a framework to understand the conflicts and a strategic model to provide decision support for biodiversity management. (Thomson J. R et al., 2005, White, R.M et al., 2009). Forest resource related conflicts have been studied in different parts of the world (Jenifer Arnold, 2012, Thomas dietz Elinor Ostrom 2003 – the struggle to govern the commons). The studies range from the theoretical and philosophical aspects of conflict (Hellstrom, E. (2001) to specific cases of conflicts on specific issues and in specific regions (Final report July 2011. (2012). New Delhi, India: United Nations Development Programme). In CFR related conflicts in India, those arising during the process of claiming, obtaining the rights and the beginning of the process of implementation have been in focus (The Indian Forest Rights Act 2006: Commoning Enclosures). (Roy, 1995; Laerhoven, 2013) have discussed the role of external agencies in helping the gram-sabha and mediating in the conflict resolution among communities.

Present study focuses on selected villages, the challenges they faced while gaining and managing CFRs. Conflict between different stakeholders is one of the big challenges in participatory natural resource management. The nature and intensity of conflict, its resolution and collective learning that help plan the next step of management are discussed in the results chapter.

BOX 1: FRA and Gramsabha

The Scheduled Tribes and Other Traditional Forest Dwellers Act (Recognition of Forest Rights) Act, also known as the Forest Rights Act, or FRA, was passed by the Indian Parliament in December 2006 and became operational in January 2008. This act supports democratization and decentralization of forest governance and empowers forest dwellers in managing their forest resources (Kashwan 2015). FRA was a landmark legislation that sauts to restore the rights forest dwellers over land (for cultivation and habitation. The sweeping reform recognized the traditional forest dweller's rights to forest resources while bestowing upon the village institutions the onus of their conservation and management. The law and its rules were ratified subsequently and adopted by states. FRA recognizes legally and constitutionally three different rights – the Individual Forest Rights (IFR), the Community Forest Rights (CFR), and the Habitat Rights.

The role of gram-sabha as a nodal agency is crucial in this, mainly in local community bonding and binding and its reflection in building resilience among tribal communities. When a community obtains CFRs, it requires some changes in the past management practices of people. The CFR areas are effectively "new commons" as defined by Hess (2008). New Commons (NC) are various types of shared resources that have recently evolved and are recognized as commons. The rules of governance of the resources may not have existed in the past or be forgotten and need to be renewed to manage the CFR areas effectively. The changes apply to the community obtaining CFR and to the other stakeholders such as the Forest Department, neighbouring villages, traders of NTFP who were dependent on the natural resources.

Chapter 2

Material and methods

Project design

The study was intended to be exploratory and descriptive in nature. To enlist and evaluate the potential seriousness of different possible conflicts in the process of claiming, execution and management of CFR was the main thrust of the inquiry followed by exploring the solutions that were evolved by the community and the key learnings that were included in the next management steps. An important decision made at the start of the project was not to define "conflict" following any specific standard definitions which may have emerged in a different context. But the idea of "conflict" and the definition was allowed to emerge from various interviews, formal and informal discussions, observations as this reflected the view of the people actually involved in the study

Study area

Three villages (Paachgao, Kondegao, Sitarampeth) in Chandrapur district of Maharashtra were selected for this study.

Map 1: Selected villages ▶
located around
Tadoba–Andhari Tiger
Reserve, TATR

Kondhegao is located in Bhadravati Tehsil of Chandrapur, Maharashtra. It has a total of 121 households, most of the population belongs to the Schedule Tribes (ST) (73%). Others being of the OBC (23%) category and very few in the General category (2%).

Sitarampeth is located in Bhadravati Tehsil of Chandrapur, Maharashtra. It has a total of 59 households, most of the population belongs to the Schedule Tribes (ST) (64%). Others being of the OBC (30%) and SC (5%) category.

Paachgao is located in Gondpipari Tehsil of Chandrapur, Maharashtra. It has a total of 61 households,

most of the population belongs to the Schedule Tribes (ST) (88%) and the others being of the OBC (7%) category.

Table 1: Details of selected CFR villages

Sr. no.	Name of village	Location	Year of receiving CFR	CFR area (hectare)	Produce extracted from CFR
1	Paachgao	19°41'32" N 79°30'11" E	16/6/2012	1006.416	Bamboo, Tendu leaves
2	Kondegao	20°14'23" N 79°18'14" E	21/6/2016	148.87	They are thinking on wild flowers and hirda
3	Sitarampeth	20°12'40" N 79°18'45" E	21/6/2016	650.16	Bamboo and they want to diversify, but don't know in what

Amongst these, Pachgaon is known for its success in implementation of CFR which is 10 years old. As compared to this, Sitarampeth and Kondhegaon, in the buffer area of Tadoba, Andhari Tiger Reserve have been granted CFR in 2016 and are in the process of managing the activities. Granted CFRs are attached as annexures.

TATR is important conservation area due to its recognition as source site for tiger population in Maharashtra (Joshi et al. 2013; Yumnam et al. 2014) and hence comparatively higher attention has been given to its development, maintenance and conservation. Geographically, TATR exists in 20° 4'– 20° 25' N and 79° 13'– 79° 33' E which extends over 1727 sq. km out of which 625.40 sq. km. remains as a core zone. Forest cover in majority of the area ends abruptly and continues as a vast expanse of cultivated land up to 12 km while going away from forest. There are 18 villages in western boundary of TATR buffer and the two project villages (Sitarampeth and Kondhegao) are among them.
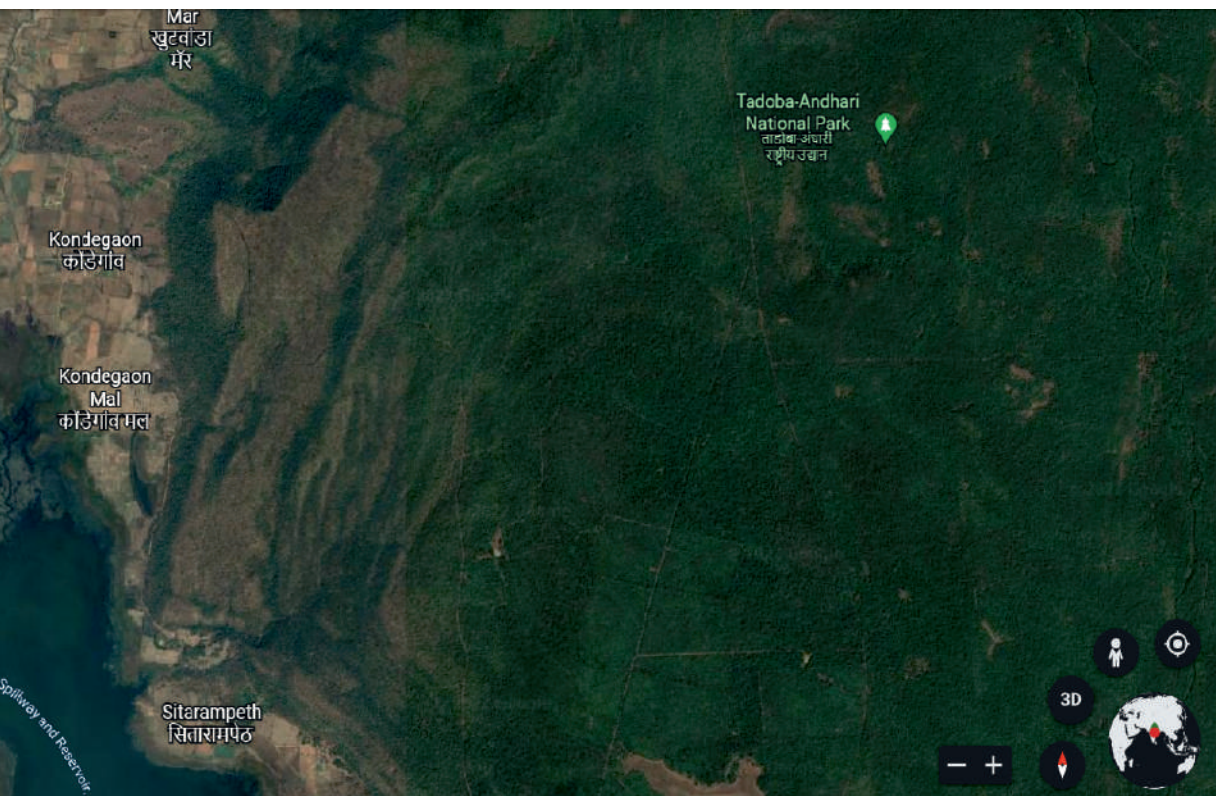
Map 2: Kondhegao and Sitarampeth villages located in the buffer zone of TATR

BOX 2: Case Study: Pachgaon secures a CFR for itself

How the village of Pachgaon secured the Community Forest Rights (CFR) for itself by applying relentless efforts and a systematic approach, makes up for an interesting case study. Pachgaon is a small village in the Chandrapur district of Maharashtra with 60 households. Pachgaon does not have a Grampanchayat of its own, it is a part of the Tohagaon grampanchayat. Aadivaasi tribes of Gond, Kunbi, Beldar, Lohar, Fulmali and others live together in Pachgaon.

In the year 2008, Mr. Vijay Dethe and his associates from the NGO 'Paryavaran Mitra' visited Pachgaon and made the villagers aware of their rights and advantages if they apply for CFR. Vijay Bhau, as Mr. Vijay Dethe is fondly called, explained the entire process and documentation required to secure the CFR. All the villagers unanimously agreed that CFR was the way forward, if the village had to progress and become a self-reliant entity. Accordingly, the village applied for CFR on 16 Nov 2009. In view of the CFR application, the villagers started conducting and attending regular Gramsabhas with a detailed discussion of all important aspects related to the village. These discussions were ably facilitated by Paryavaran Mitra. On 17 Dec 2009, an official application for the CFR was submitted, thus triggering the actual execution of tasks on field. While the Pachgaon villagers kept sending regular follow-ups and reminder letters to the Forest Department and other relevant authorities, the response they got was a consistent delay in the process. No official letters or notes were sent by the authorities for the CFR. Regular physical follow ups to the government offices meant that the villagers had to spend their hard-earned money and endure the scorching 48°C temperature to meet the non-coperative officers. This went on for a long duration of 2 years, till the year 2012. On 27 Feb 2012, a letter was sent to the Collector, stating how important the CFR was for Pachgaon's livelihood and reinstating the granting the CFR soon. Unfortunately, there was no response from the authorities on this letter too.

Finally on 14 March 2012, Pachgaon sent an official letter to all the concerned authorities giving them only one more month to think and review all the formalities completed for CFR, and grant the CFR immediately. The letter clearly indicated that the Pachgaon Gramsabha would go on a Satyagraha starting from 14 April 2012, if this letter was ignored too, it was highlighted that the Satyagraha would include establishing management rights for the Gramsabha, based on an assumed CFR. Even this letter was met with no response from the authorities, for many days. Meanwhile the villagers and the Gramsabha, started preparing for the Satyagraha, which became evident to the villagers of the other villages and also some authorities. This gave them an idea that a Satyagraha was imminent, if the CFR was not granted immediately. Therefore, a letter declaring that Pachgaon was being granted a CFR was faxed on the 13 April 2012, to the Gramsabha. Thus, a journey of ~ 3.5 years, culminated in this declaration. An official document of the CFR was sent by the authorities shortly. However, the real struggle for the of the Pachgaon villagers began after securing the CFR.

Forest fires are a constant problem in the dry season, consistently burning between 2% and 16% of the park each year. The predation of domestic livestock by tigers and leopards is a frequent phenomenon in all the neighbouring villages. This has an adverse impact on the economic condition of the local people and results in a negative view of reserve management. Other wildlife is also abundant and crop predation is a major problem apart from other wildlife conflict incidences. Man-animal conflict

is surely increasing in Tadoba Andhari Tiger Reserve (TATR). Tiger attacks are reported while working in the farm, while collecting NTFP and even on fringes and on road sides in fully functioning village areas as well. Tiger tourism is an important economic activity in the landscape.

Intensive interaction with three villages and Additional on-site discussion with Wadala and Wiloda potential CFR villages nearby were also made. Villagers of Wadala had made substantial efforts to file CFR claims, Kondhegaon and Sitarampeth actually benefited from Wadala's efforts.

Materials and Methods

Qualitative methods are used for collecting information for this study. The background information about the CFR areas was collected from secondary sources and information from the local stakeholders through PRA (participatory approach methods) Primary Data was collected through Semi Structured Interview (SSI), Focus Group Discussion (FGD), Expert's Consultation and Observation. Informal interview was also carried out to get more information.

My previous work in the area for past 7 years had helped to developed rapport with the community as well as other officials through my work. Hence the data collection of ethnographic data (Etkin, N. L. (2009), Thomson J. R et al., 2005) and in-depth interviews were possible. In the process I could bring together various stakeholders, enable conversations among them, could list the conflict areas and hurdles. The learning of community and relevant process is also absorbed and understood. External agency in the form of NGO who is constantly working in the selected area over last 15 years proved very helpful in fulfilling projects aims and objectives.

Key stakeholders and respondents in this participatory study were identified at the beginning. I also talked to women groups in the selected villages and discussed about CFR management and their focus on participation. They were interviewed either individually or through Focus Group Discussions, carried out in groups using PRA methods.

▼ Photo 1: Focused Group Discussion (FGD's) with the women of Pachgao village

▲ Photo 2: Transect walk in Sitarampeth village

Transect walks were made with the respondents in the CFR areas. Preliminary discussions helped identify stakeholder groups and divide them as follows (table below). Respondents were chosen from the primary stakeholders and facilitator NGO.

Table 2: List of Stakeholders

Primary stakeholders (Direct control on land and resources, economic benefits, legal responsibility for resource protection)	Secondary stakeholders (No control on land and resources, potential economic benefits, no direct legal responsibility for resource protection)	Other influencing groups (No control on land and resources, no economic benefits, no direct legal responsibility for resource protection, but play an indirect role and may gain or lose certain benefits from the resource)
1. CFR rights holders	1. Traders	1. NGO (facilitators), (environmental or wildlife organizations)
2. Forest department	2. Villagers (other than CFR holders)	2. Neighbouring villages
		3. Local politicians

Understanding conflict was an important part of this research. Some scholars perceive conflict as a potential for both positive and negative outcome with creative or destructive manifestations (Abu–Nimer, 2001; Swaminathan, 1999). The respondents in this study were asked to identify nature of positive and negative interactions among the different interest groups (above) and categorize them as conflict or solutions. Based upon their answers, the interactions which could potentially threaten the CFR are considered as the most negative while those that lead to better livelihood gains from CFR are seen as most positive. The negative interactions are the conflicts while positive interactions are the solutions to conflict or steps to avoid conflicts.

Questionnaire and consent form were prepared after detailed discussion with senior psychologist Dr. Sujala Watve and anthropologist Dr. Girija Godbole.

Interviews of the respondents and FGDs to get answers to following questions:
• What was the nature and frequency of conflicts over CFR areas?
• Are their "actors" among stakeholders in the development of conflict?
• What was the social/political context for the conflict?
• What were the consequences of the conflict? (e.g., on livelihoods, on resource base?)
• How did the community deal with the conflict and was it through local democratic processes?
• What are the relative roles of central agencies in preventing and mitigating the conflict, how people perceive the role of such agencies such as the police, collectorate, legal systems etc.
• What is the nature and frequency of application of various solutions (amicable or otherwise) ?
• Whether personal relations within or between communities or stakeholders play a role in conflict resolution and long-term solutions

Secondary data were collected from CFR records in the study area, TATR Field Director's office and other line agencies and libraries. Documentary evidence (video link) was collected for the processes that led to the granting of CFR and the post CFR management practices in three villages in Chandrapur district.
(https://www.youtube.com/watch?v=r9mXAyg1zdc),
(https://www.downtoearth.org.in/blog/forests/balancing-rights-and-responsibilities-community-based-forest-governance-in-maharashtra-56435)

Apart from this, I was attending various gram-sabha meetings to observe the discussions first-hand. I could also witness bamboo auction that is completely managed by pachgao gramsabha without any external inputs and people. Minutes of some meetings were collected; recordings were made and other audio-visual material is collected after consent and analysed.

◀ Photo 3: Witnessing Bamboo auction at Pachgao village

With the consent of the respondent, the interviews were recorded. They are in local language (Marathi and few Gond words as part of local language) and hence were translated for analysis.

Photo 4: Entire Pachgao Gramsabha before the auction

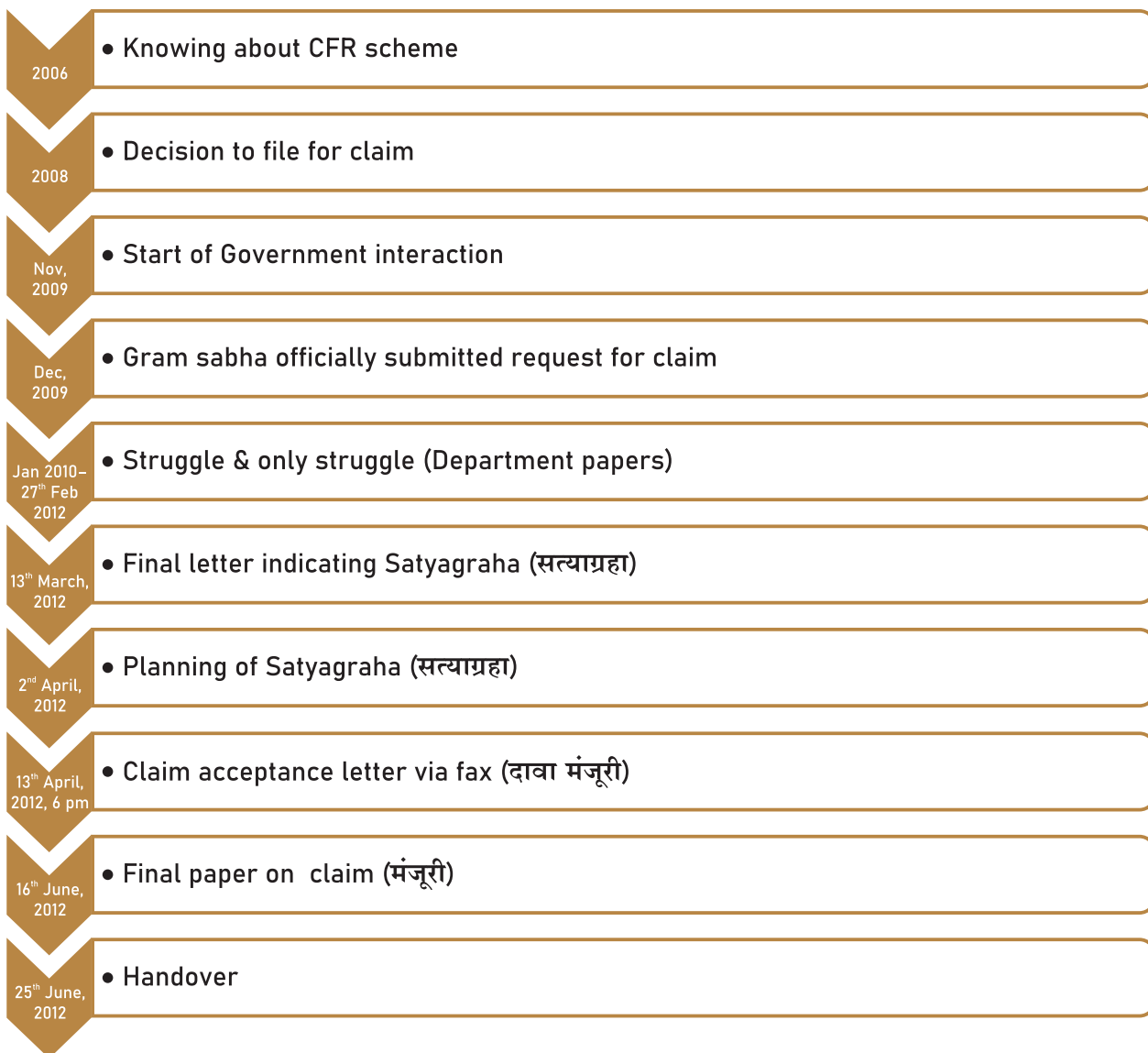Photo 5: Taking consent of respondents

Data analysis

The interviews recorded, translated and analysed according to the following themes: conflict between primary stakeholders, conflict between primary and secondary stakeholders and involvement of influencing groups in conflict and conflict resolution. It was inevitable that the individual stories came up with their own biases, but when all sides are heard, enough details can be gathered to discern the reality beyond anyone's bias. The number of stories can be put together to extract common factors and principles. The inevitable versus avoidable components of the conflict and the crucial roles played by key persons and key factors in the conflict resolution are understood. The time line of conflict emerged through the data analysis. Granting of the CFR is a major benchmark in this, and nature of conflicts before and after it and the relationships between primary stakeholder's changes with granting of CFR. The management related issues also change once the CFR is granted. A timeline is prepared to develop chronological sequence of various management steps, conflicts and resolution mechanism tried. This was really interesting and brainstorming task as many small and big events always appeared during the discussion.

Specific aspects in methodology

1) Interactive meetings with special focus on respondent's identification.
2) Stakeholders listing and analysis keeping in mind issues, positions, interest, need, means of influence, willingness to negotiate conflicts and Multiple Perspective nature of response.
3) Community focused group discussions (FGD) and Semi-structured interviews
4) Trans-disciplinary methods of qualitative research, Observations, interviews of key "actors", (with various stakeholders– community members, NGO, Forest Department, Traders).
5) Data collection included views of marginal groups as well as women in the study area to ensure different views are included.
6) Text and audio-visual documentation and analysis by involvement of qualitative researchers.
7) Reflection and analysis – shared and integral vision and framework development
8) Defining a model for desirable future.

During analysis I have used methods keeping in mind purpose, potential users, ensuring keen observations, listening to what is said without biases, asking for factual data, collecting relevant data, basic statistical documentation of study areas.

Figure 1: Timeline of Conflict in Pachgao village

2006	• Knowing about CFR scheme
2008	• Decision to file for claim
Nov, 2009	• Start of Government interaction
Dec, 2009	• Gram sabha officially submitted request for claim
Jan 2010–27th Feb 2012	• Struggle & only struggle (Department papers)
13th March, 2012	• Final letter indicating Satyagraha (सत्याग्रहा)
2nd April, 2012	• Planning of Satyagraha (सत्याग्रहा)
13th April, 2012, 6 pm	• Claim acceptance letter via fax (दावा मंजूरी)
16th June, 2012	• Final paper on claim (मंजूरी)
25th June, 2012	• Handover

At the same time, I tried to understand the mechanism of adopting resolution practices. The number of conflicts over issues and over time are noted, and the way they are resolved, either internally or externally, through mediation or legislation etc are also noted. Chart of the same is also added in the annexure. This is used later in offering a framework that can help early detection and prevention of the conflicts. I have used trans-disciplinary methods of study which are designed specifically for community-based interventions. Attempt is to comparatively analyse with impersonal, non-judgmental, anonymized, generalized and generally useful inferences. Analysing the scenarios and comparing between more mature CFR areas (like Pachgaon) and the newly granted CFRs was very useful to come up with the framework for all and also a tool of adaptive management that can help the CFR holders to achieve success. Inferences and comments by experts attached in the last chapter can be very useful in planning and policy making in the long run.

Chapter 3

The multiple dimensions
of conflict

Conflicts are a characteristic of human society and appear in many forms. **Literature on conflicts describes many types.** At the beginning of this study, we had followed Tatpati, to understand the typology of conflicts. We also came across standard scales and definitions used by various authors (See Table 3). Field studies provided a very detailed, fine-scale understanding of conflicts from the perspective of community, which is presented here.

Table 3: Types of conflicts and their definitions:

Sr. no.	Conflict type	Definitions
1	Expressed unexpressed	Conflicts that are communicated verbally or non-verbally (Wilmort & hocker, 1998)
2	Latent conflicts	Participant not aware of conflict
3	Overt conflicts	People openly disagree and choose to confront or address an issue
4	Interaction level	People perceive this as incompatible goals and interference from each other in achieving the goals
5	Inter community level	In between two communities (CFR holder village and CFR non-holder village)
6	Intra community level	In individuals over various decisions
7	Cultural related conflicts	The conflict of behavior patterns or values that results when different cultures are incompletely assimilated
8	Social	A negative social interaction or relationship which tends to be competitive, argumentative. (Attitudinal, Behavioral, Consequence based (media initiating conflicts)
9	Procedural/ process conflicts	Disagreement over how to achieve a goal an even resolution. It relates to aspects such as who should be involved in decision, how to go about it, what is to be followed
10	Severity based	Serious disagreement which not yet reached to any clear agreement.
11	Long term and short term	A prolonged event or situation continues for long time or longer than expected
12	Legal	Opposition or conflicts between the applicable law/jurisdiction applicable to CFR law. These are variable based on land records vagueness of definitions, variability of understanding and interpretation by stakeholders
13	Ideology level	Disagreement over opposing ideas, concepts, strategic influences over promoting interest
14	Ethical	'हिंसा–अहिंसा' – personal beliefs colliding with organizations, creating negative consequences such as stress, lack of commitment, absentism, etc.
15	Environmental conflict	It's a subset of public conflict involving issues of ecology, economics (d'Estree, Dukes, Navarette-Romero, 2002)

**Multiple dimensions of conflict (over CFR area)**

Understanding of conflict: In the preliminary discussions, the respondents were asked to define conflicts in their own words. The Marathi words used by respondents varied from "sangharsh" which is a direct translation of "conflict" to more nuanced "bhandan" (verbal disagreement), "vaad" "vadaavadi" (a discussion with opposing arguments), "matbhed" difference of opinions, 'maramari" (actual physical fight or a very strong disagreement). The word "sangharsh" is actually used only for more intense conflicts with institutions or systems involving group demonstrations or long-drawn ideological, procedural issues.

General literature gives multiple dimensions in which conflicts can be viewed (Table 3). All of these can be seen to various extent in the study area. They are essentially between various human groups, and can be seen as social conflicts.

Not all conflicts are easily visible to a researcher, even after familiarity with the community under the lens. These are unexpressed or latent conflicts (1, 2 in Table 3). Management of CFR involves discussions in an open and democratic manner especially in the gramsabha. Hence unexpressed latent conflicts will destabilize the process of discussion. They may affect social interactions and also management decisions within CFR indirectly.

The open or expressed conflicts can be about the objectives of management. out of differential expectations from different agencies. The CFR promoting NGOs as well as government departments including Tribal Welfare and Forest Department are working towards systematic documentation such as CFR management plan for a village including sustainable use. The community may not always agree on this and may like to have quick livelihood gains or economic yields from CFR.

The conflicts over natural resources or forests are often described as community–outsider conflicts. The actors from communities are generally groups such as shifting cultivators, indigenous peoples, and local residents in and around forest areas. Yasmi et al (2013) takes unit of analysis as a 'local community' (usually a village or a group of villages located in the same area) and treat these actors
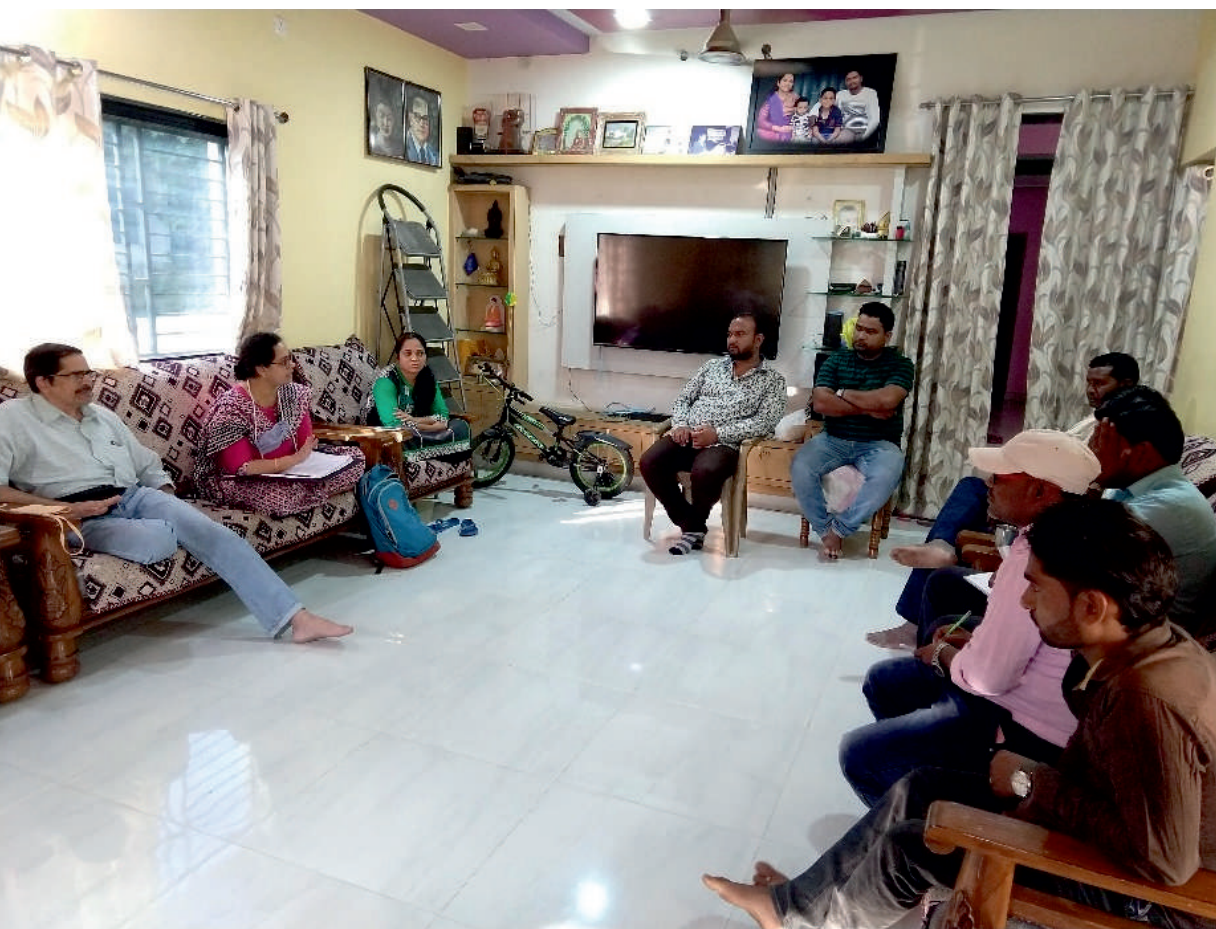
Photo 7: Identifying actors during discussion with Key Respondents at Paryavaran Mitra office, Virur station, Chandrapur

as a single entity in classifying conflicts in recognition of the fact that communities often face a collective threat from external actors when it comes to logging, mining, hunting etc. However local communities are not necessarily homogenous and that different members of communities may have different interests in a conflict as pointed out by Agrawal and Gibson, 1999.

Therefore, our analysis also examines how conflicts differentially affect members of a community,

BOX 3: Case study: Pachgaon Gramsabha makes rules

In the last two cases, we saw how Pachgaon Gramsabha was able to secure the CFR for the village and which all conflicts they had to face after securing the CFR. Both these cases happened across a span of ~5 years. As soon as the CFR was granted, the Pachgaon Gramsabha knew that they had to first start working towards uniting all the villagers with one common goal. The Gramsabha and villagers also decided to collaborate on what all improvements they could undergo as a village or a single unit. The NGO Paryavaran Mitra, had also started facilitating the employment programme by the government, in Pachgaon. As a CFR granted village, their main aim was to manage and maintain their forest resources to ensure a sustainable livelihood generation. And this would only be possible if they had good processes in place, which would ensure seamless functioning of all the villagers. Thus from 2013, the Gramsabha and villagers started discussing and forming rules and processes, conducting regular meetings of the Gramsabha, and asking explanations wherever required. As a result of this unified approach and regular discussions, the Rulebook for Pachgaon was formed.

This Rulebook contained information like what is the nature of collection rights (निस्तार हक्क), what should be done to ensure the proper management of given rights. The Rulebook also defined certain rules that the villagers would follow, the villagers themselves contributed to the list of rules. A Forest Protection team was defined and it was agreed upon that each household would send members turn by turn to be a part of this team. A 'Monitoring team' and patrolling team was formed and was given the task of monitoring the forest day and night. A fine of Rs.200 was decided upon and imposed on a person who refuses to go for monitoring. All these decisions were taken in agreement with everybody. In a special Gramsabha organized on 26 Jan 2014, improved and also modified and accepted version of rule book (नियमित सुधारित मसुदा) was approved by the village. A lot of youth of the village was involved in these developments. All villagers were also involved in understanding the strengths and weaknesses of each other. This helped in understanding how an individual could best contribute to the livelihood of the village.

Once the execution of the work started in the forest, it became important to abide by the agreed rules. However, many instances of rule breaking and rule following came forward, which led to internal conflicts. The question of how to implement rules when people turned up drunk for monitoring, when people spoke ill while at work, when somebody realized their mistake after breaking a rule, became more prominent. Rule breakers and rule flower conflict was very strong even today and actually it is the main barrier identified. The percentage of rule abiding/following individuals kept increasing steadily. Slowly, it led to formation of two separate groups and conflict became evident amongst the villagers, one of rule followers and one of rule breakers and eventually their followers are contributing towards more and more internal conflicts.

exploring the various dynamics and interests that exist within communities. Based on detailed observations, discussions and review of various conflict situations, we identified two primary stakeholders in the CFR area as main "actors" that are commonly directly involved in conflicts CFR holders and government conservation agency which is forest department. Other actors are members of local community (village) who are not CFR holders, For the purpose of this study, we have identified secondary stakeholder groups and influencing groups that may influence the actors (See Methodology).

Conflict between primary stakeholders is inevitable at all stages, but is highest till the grant of CFR.

BOX 4: Case study: Human-Animal-Forest Department conflict at Sitarampeth

This case study from the village of Sitarampeth deals with the most common of conflicts, which is the Human-Animal-Forest Department conflict. Recently in 2021, a case of a Tiger attacking and dragging away a shepherd and four farm animals occured in Sitarampeth village. This case reinforced the fact that some measures had to be taken by the Forest Department to ensure that both the humans and animals safely coexist.

Tiger attacking the villagers and farm animals of Sitarampeth had occurred earlier in 2018 also, wherein the villagers felt that the Forest Department had not envisioned and mitigated this risk. The reoccurrence of the same type of attack by the Tiger in 2021, angered the villagers even more. They realized that the Forest Department was not looking at this human-animal conflict seriously, and was delaying the action to be taken on the same. The villagers felt that a solution could be found out to safeguard everyone in question, by brainstorming this problem along with the villagers.

Sitarampeth village having CFR has two entry points, called tola a and tola b (please replace the word 'Tola' with an appropriate English word) Entry point A and Entry point B, in Sitaram Peth village which are 1km apart from each other. There are internal conflicts in these two tolas, current situation is that do not discuss about the CFR and management amongst each other. There also are unresolved and common conflicts between the villagers of Sitaram Peth. In the recent attack, the Tiger attacked and killed the shepherd coincidently another brother of the victim got killed by the tiger 6-7 years ago from the same household this angered the villagers even more and they demanded a strong action by the Forest Department to avoid the Tiger conflict. The villagers feel that the Tiger gets directed to the village as the Forest Department has put up a fencing in many parts of the village. Villagers claim is that the solar fence has altered the movement pattern of animals and so now the Tigers are compelled to take the path passing close to Sitarampeth village.

Usually in such Human-Animal conflicts, if a village Gramsabha gets into a collaborative discussion with the Forest Department, the discussions keep happening without any result. If the Sitaram Peth Gramsabha, an NGO and the Forest Department form a study group and identify all the observations and action points, they can implement logical steps to solve this conflict. This is coming as strong suggestions form villagers.

Surely what we see today around the reserve is Carnivore conflict in CFR villages is becoming very frequent and it really needs immediate resolution.

Every single step till the granting of the CFR involves some amount of tussle between the Forest Department and the community claiming CFRs (Refer to Case study 2). These continue later as well, in the management planning stage and implementation. Forest Department remains a regulating agency with higher legal power than the community. While CFR holders have more decision-making power in management than the forest department. Wildlife conflict (crop predation, livestock predation and human deaths) are a very common occurrence in the study area (Refer to Case Study 5). Two of the villages (S, K) are in the buffer area of TATR and hence their CFR area has movement of wildlife creating potential conflict.

Secondary stakeholders are the traders and village population that does not participate in CFR directly. Their gains can vary with the management decisions, and that can lead to conflict as well. The other influencing groups among these are do play a key role in these conflicts. NGOs facilitating the CFR claims and management support the community and hence may have negative interactions with the forest department. Their previous experiences, ideology and politics can influence the matter.

At the same time, environmental / wildlife organizations (especially in case of TATR) support the forest department, often unequivocally and do try to influence the CFR management, often for the purpose of wildlife protection. Politicians may also influence the conflict situation for their own political gains.

The external agencies involved in conflict resolution are the law-and-order system in the form of police, state administration and judiciary. They are involved mainly in case very serious conflicts that require legal processes.

Interaction between gramsabha and grampanchayat can also cause some friction among the groups. The methods of working of gramsabha and gram-panchayat are quite different. Gram-panchayat is subject to the dynamics of electoral politics. Conflicts during election time linger on later in the community. Political parties create or escalate divides in villages due to which the unity required for CFR work is often disturbed substantially. In addition, the decision and implementation procedures of gram-panchayats make corruption possible. Therefore, individuals occupying key power positions in gram-panchayat may not like the gramsabha taking decisions. We were not given actual instances of a gramsabha-grampanchayat conflict by the respondents but many agreed that this was a subtle conflict angle often encountered.

Heterogenous nature of the society and the varied backgrounds/positions of the stakeholders need to be considered while understanding conflicts. Caste, class and gender division in Indian society especially in rural areas influence all spheres of life.

The CFR holder community in this study is entirely tribal, sharing a common culture. However, the influencing groups, the other stakeholders (represented by NGO workers, Forest officials, traders etc.) are non-tribals. Although familiar with the local culture, they are still outsiders to the CFR holder group. As against this, CFR holders do have common cultural ties, very often are actually related to each other by blood or by marriage and hence have relations other than for the purpose of CFR. This may lead to some of the other social conflicts influencing CFR related relations, and vice versa.

Class distinction are not evident in the community. However, economic gains from the CFR area may be (or perceived to be -) unequally distributed leading to some profiting more from the forest resources than others. This itself can lead to conflicts that need to be resolved to ensure equal sharing of benefits.

Gender conflict: Relatively little attention has been paid to whether and how CFR can enable women empowerment, although the importance of this issue is recognized (Pattnaik, et al. (2016), Zaidi, Mubashira. (2019), Sahoo, et al. (2015), Sharma, et al. (2017)). The gender relations are subject to patriarchal system, although women do play a key role in the community. Women did not always participate equally in the gramsabha discussions in the study area and hence any unexpressed conflicts related to gender could not be understood. However, in the Pachgao gramsabha, where women do participate strongly, they expressed certain concerns that indicate the gender dimension.

The focus here is on CFR conflicts, which, we define as 'negative interactions or situations that occur when two or more stakeholders in CFR area disagree over causes such as management of CFR area, including, access, withdrawal and/or trade of CFR resources, sharing of benefits, protection of CFR area and wildlife within the CFR area'. This definition recognises that CFR conflicts occur mainly between stakeholder groups. The primary stakeholders are legally responsible for the CFR management while the secondary stakeholders are benefiting from the resources. Influencing groups, are neither directly responsible nor direct beneficiaries, but have other stakes in the related areas or resources.

Disagreements over CFR management are inevitable. The challenge lies either in preventing these conflicts from developing into damaging conflicts or seeking to manage them and minimise their destructive nature when they occur. CFR conflicts emerge when the interests (economic or conservation interests) of primary stakeholders in CFR are threatened by the other primary or secondary stakeholder groups, or certain groups are excluded from benefits, or there is no agreement regarding actions to be taken for managing the CFR. The conflicts can have a positive impact, if the resolution leads to learning of all involved and creation of permanent mechanisms for better management.

The interviews, documented accounts and group discussions led to a collection of conflict stories which are classified below and analysed here keeping the players, date and places anonymous. The conflicts are classified along multiple dimensions and discussed in the context of their importance to CFR management.

◀ Photo 8: Group discussions to collect conflict stories in Kondhegao village

Typology of conflicts:

1. Space and time related: Conflict over CFR area (or the resource therein) is a "space conflict". Demarcating the CFR area is always challenging as the boundaries need to be recognized by the Forest Department as well as the adjacent villages which may be using the same area for resources. The other dimension of "time" can be looked at on short- and long-term basis. The conflicts before granting of CFR are mainly between the CFR claiming groups and Forest Department (representing government) and can be called as Pre-CFR conflicts. After CFR approval, conflicts with Forest Department continue although their triggers change. Additionally, conflicts within the CFR holder group, those with non-CFR holders in village and adjacent villages may get triggered after the receipt of CFRs and they can have serious implications for regular management. These can be classified as Post CFR conflicts.

2. Management related: The conflicts can also be understood using the matrix of "bundle of rights" (Schlagel & Ostrom**) suggested to understand natural resource management. CFR provides for the transfer of Proprietory rights (– access, withdrawal, mmanagement and exclusion) from the forest department to the local community. This is always a problematic and long drawn procedure. Previous laws (Indian Forest Act) and policies (Forest policy, 1988, JFMC) have prepared the grounds for the Forest Department (land owner) to give access, withdrawal rights, management rights (Authorized user and claimant rights), mainly to a selected JFMC which continues to work under the forest department supervision. However, CFR allows trade of resources which the CFR holders can do on their own, take management decisions on their own and even exclude someone (other villages, traders) from the use of resources through making rules. Although forest department continues to be the owner of the land (thus retaining the right of alienation), it has to share the power for management decisions and is actually having less say in the matter than in the past, with the gramsabha being the decision maker. Transfer of rights along with the power to make rules independently change the previous power structures related to forest resource. The conflicts between the primary stakeholders CFR holders and Forest department need to be looked at keeping the changing nature of power structures in mind.

Table no 4: Conflict background and Actors Analysis

Background and brief description of conflict	Case	Primary Actors	Conflict description
1. Local community vs. Forest Bureaucracy	Pachgao, Chandrapur Dt.	CFR claimants, DCF, ACF and other field staff of the forest department	After claiming CFR over forest land (in 2009), there were many extreme disagreements over boundaries of CFR, field verification was delayed, documents were taken multiple times, formal answers were not given and the community felt that the bureaucracy is purposely delaying all processes. NGO supported the local community in the formal, legal processes and the CFR was finally given (approved on 16th June, 2012).
2. Local community vs. Forest Bureaucracy	Kondegao, Sitarampeth	CFR holders, Field Director, DCF, ACF and other field	CFR has been awarded to the village in 2016. It includes ** land which is adjacent to the TATR (is in buffer). CFR holders decided to start a plant nursery as part of livelihood activities for

Table continued ↴

		staff of the forest department	which fencing is necessary considering crop raiding by herbivores. Approvals by the forest department for these activities were delayed, rejected, given conditionally stalling the processes. NGO and external negotiators helped to get the necessary permissions and the nursery could be created in ***
3. Local community vs. Forest Bureaucracy	Pachgao, Chandrapur Dt.	CFR holders, DCF, ACF and other field staff of the forest department	Pachgao CFR area has Bamboo. The trade of this in the past was done by the forest department by auction or directly to select traders. After receiving the CFR, the community held the rights to cut and trade on its own. But the FD has to give formal approval at each step. Permissions needed for cutting the bamboo were delayed. License for transport of bamboo was delayed. Both sides tried to control the auction process. The FD staff was in favour of certain traders who had monopolized in the past. The community wanted open and transparent auction to attract more and higher bidders. Community asserted their right to hold auction (almost excluding the FD).
4. Local community vs. Forest Bureaucracy	Pachgao, Chandrapur Dt.	CFR holders, DCF, ACF and other field staff of the forest department	The local community held rights of grazing cattle (access) in the forest land. Grazing licenses are issued at regular intervals, following provisions of IFA (1927) and grazing rules/policies. Previously, the access for grazing activities included land larger than the current CFR area. After the grant of CFR, these licenses are delayed or not given and on inquiry the community is told that now they have rights to graze in CFR areas and licenses will not be issued. The effective area of grazing becomes limited and pressure on the resources of CFR increases with possible degradation. Customary rights over areas other than CFR are denied.

In other two villages there is confusion regarding boundaries of CFR and people fear the FD action. Notices are issued for crossing the CFR boundary. |
| 5. Local community vs. Forest Bureaucracy | Kondegao, Sitarampeth | CFR holders, DCF, ACF and other field staff of the forest department | Wildlife crop raiding, livestock depredation and human attacks are very common in the buffer area of TATR. Compensation is awarded for the losses to lives, livestock and property as per the WPA rules. However, it depends upon the nature of attack and where it happened. There have been disagreements over wildlife in CFR areas and frequent attacks, due to this commonly occurring conflict the inevitable expectation is something plus compensation. |

			For example, in one of the villages they have asked for permanent jobs with Forest Department after second consecutive death in the family.
6. Within local community	Pachgao, Chandrapur Dt.	Within CFR holders	After receiving CFR, management rules had to be framed (such as patrolling duties, fire guard, harvesting resources, etc.). There were several disagreements over prolonged period. Ultimately every member was asked to contribute to making rules and then each suggestion was debated and accepted after common consensus/voting in Gramsabha. A rulebook is made for reference.
7. Within local community	Kondegao, Sitarampeth	Within CFR holders	Some of the CFR holders in this area are employed on temporary basis by the FD in various activities (nature guides, patrolling in and around the CFR, ecotourism activities etc.). Their role, responsibility and allegiance are always questioned by FD as well as CFR holders. Their dependence on income from FD activities may get jeopardized if the conflict between community and forest escalates. Many times, the effect is on complete ban on few activities performed by communities. Systematically stopping the involvement of community for managing specific activity. The resolution to this power not yet figured out, but few gram sabha's are taking consultation from legal person to resolve and draft notices and letter addressing such issues.
8. Within local community	Pachgao, Chandrapur Dt.	Within CFR holders	A detailed rulebook prepared by gramsabha and is accepted by all. However, there are some rule-breakers who shirk the duties or break the rules. The conflict spread over small incidences, leading some activities not permitted in CFR, breaking the rules. They were punished and excluded from benefits and one person apologized and was assigned work once again.
9. Between local community and neighbouring village	Pachgao, Chandrapur Dt.	Between CFR holders and neighbouring villagers	Neighbouring village also was accessing the forest areas. After the grant of CFR, they were not allowed to take resources from CFR areas leading to conflicts. They were seen as trespassers, and the CFR holders tried to prevent it leading to conflict. It was resolved by negotiations but individuals continue to come for fuelwood and in search of "hidden treasure" – a local belief. Complaint lodged with FD. Guarding can be done by the CFR holders, but legal action can be taken by FD only.

Table continued ⌐

| 10. Between local community and environmental NGOs | Pachgao, Chandrapur Dt. | Between CFR holders and environmental organizations | Since the CFR claiming and granting, environmental researchers are active in the region. Some are working with the community and some with the FD. Some projects were taken by the researchers who wanted to implement it in the CFR area. They also prepared a CFR working plan and had conducted training of youth. However, the community felt lack of true participatory working and did not agree with the objectives of the suggested plans. Other environmental organizations, working with wildlife were seen as against people and hence their work was not supported by the community. Some researchers and organizations are excluded now and their inputs are not taken. |

These can be divided as follows:

A. Conflicts related to management rights:
These are mainly between the primary stakeholders: Government/Forest department as the legal owner of the land vs. CFR holders as Proprietors gaining management rights. These will be mostly "Pre-CFR".

B. Conflicts related to management actions:
These are between the primary, secondary stakeholders and influencing groups– those having direct and indirect benefits from the CFR areas, but not having any legal rights over it (traders, organizations, neighbouring villagers) may often be triggers for the conflicts owing to their vested interests.

These could be,
a. Process related conflicts– debates over making or compliance of certain rules, patrolling, management actions etc.
b. Product related conflicts– forest produced to be harvested, employing people or involving in livelihood gains, prices to be set etc.
These will be mostly "post-CFR"

3. Resource related
An interesting dimension to the conflict is the nature of resource and how it is understood by the stakeholders. (River, forest continuous, while boundaries of CFR) (wildlife habitat vs extractive use).

Intensity of conflicts

The conflicts can also be categorized based upon the intensity as low, moderate or high. But when asked to define "serious" or "high intensity" vs. those of "simple" or "low intensity", the answers varied. The intensity can be judged by **cause** (the nature of disagreement that led to conflict) as well as by **effect** or impact (the outcome of the conflict). The cause could be a disagreement about harvesting or trade or making or following the rules of protection, collection etc. Sometimes, the cause may be a very small problem, but it escalates into more and bigger, conflicts, which progressively increase the intensity of the conflict and go on for long time (For example Pachgao and forest trade management as discussed in Case studies). The effect could be tensions between individuals which can affect life in a small village, complaints against each other, potential or actual violent altercations, loss of livelihoods, loss of resources and finally the loss of CFRs themselves.

Though loss of CFRs or loss of livelihoods can be considered as most negative effect of a conflict, it may be an outsider's view. For the residents of small, homogenous village, tensions and complaints against each other are also a very serious issues as it affects relations in other spheres of life as well. With interactions, it has been narrated to us that rule breaking, within community heterogeneity are serious and commonly occurring conflicts where enforcement of rules and avoidance of conflicts and amicable resolution mechanisms for conflicts and its reality check and systematic documentation is necessary. We looked at the framework for case study selection of community–outsider conflict (Yasmi et al, 2009).

This study is mainly looking at adaptive management. Hence, we have chosen to classify conflict intensity, not based on cause or effect, but based upon **conflict resolution**. Those conflicts, that could be resolved by the democratic procedures within the CFR committee itself are considered "Type 1" conflicts while those that cannot be resolved by the CFR committee and need external intervention, and sometimes even legal recourse are "Type 2" conflicts.

Type 1 conflicts may be due internal tensions or disagreements within CFR holders or stakeholder groups, can be solved within short time, and may not harm or lead to reversal of the CFRs.

Type 2 are between the stakeholder groups and tend to be long drawn, with a potential to jeopardize CFRs and lead to reversal/loss of CFRs.

Analysis of conflicts
In this part, the main conflict situations are briefly described along with the actors (Table 2). More information on underlying causes and impacts will be illustrated in Chapter 5 as we synthesize those elements across cases. Systematic documentation, data organization, collective comparative analysis helped us to look for common principles and local peculiarities from a conflict resolution perspective.

The direct causes of conflict varied across the 10 situations. In general, conflict was triggered by a change in resource access as well as management and trade rights (Shlagar and Ostrom, 1992). The community had the rights of access and withdrawal for subsistence alone before the CFR (headloads of fuel, grazing), Although they had some rights over collection of NTFP, tendu, bamboo, etc) the commercial trade was controlled by FD or managed through JFMC. Changes in the right to manage, trade NTFP and to make collective rules regarding exclusion led to conflict issues. However, though initiated by changes in resource access, all studied conflict cases were enabled by more fundamental factors — the underlying causes.

Photo 9: ▶
NTFP
collection
in CFR of
Pachgao
village

BOX 5: Case study: Pachgaon passes the Tendu leaves resolution.

We saw in the last three case studies, how the Pachgaon Gramsabha and the villagers had to face so many struggles with the Forest Department, right from securing the CFR to acquiring the Transit permit for the resources. The villages and the tribals believe that the Forest Rights Act (FRA) of 2006, has not been favorably accepted by the Forest Department, which is the major reasons for such conflicts, delays and blame games. The Pachgaon Gramsabha faced a new challenge and conflict with the Forest Department, with regards to the Tendu tree leaves.

The PC book/Transit Pass (please add the correct English name for PC pustak) was handed over to Pachgaon in 2016. Meanwhile, the Pachgaon Gramsabha had discussed and finalized amongst themselves a decision keeping in mind conservation of the forest resources. This decision was that they would not collect Tendu leaves. Tendu leaves are one of the most prominent forest resources in India. The Tendu leaves are used in rolling the Beedis. Beedis have been in demand across India, from the British rule times. Since those days, collection of Tendu leaves from across various forests has been continued as a process. Beedi manufacturers always look out as constant source of Tendu leaves and many tribal villages with CFR, become such constant providers. Approximately, 550 billion Beedis are consumed across India in a year. A turnover of around 400–450 crore Indian Rupees in Tendu leaves trade, happens alone in Gadchiroli district. The Tendu leaves need to be collected from the forest and are bundled together in small bunches for auction and sale. Lot of Aadivasi are involved in this industry, which in turn generates lot of livelihoods for the villages. Pachgaon villagers were also involved in this Tendu leaves collection process, until 2012. However, the villagers realised soon that by being a part of Tendu leaves collection process, they were indirectly supporting the vice of Beedi smoking. They also realized that plucking Tendu leaves would lead to slowing of the tree growth and it would not yield any fruits, thus disturbing their natural balance.

The Forest Department would give contracts to Tendu leaves contractors, and these contractors would come to the village to collect the leaves. This was the normal process. However, after securing the CFR, Gramsabha was of an opinion that whether to collect and sell the Tendu leaves, is a decision they could take. They received a letter asking if they were going to collect the Tendu leaves or not. The Pachgaon Gramsabha called for a meeting, wherein there wasn't clarity amongst the villagers, because Tendu leaves was a profitable and instant income generation resource. But finally on 22 March 2014, Pachgaon Gramsabha passed a resolution that their village would not collect Tendu leaves, and they have been firm on this resolution till date. But the Forest Department was not happy with this resolution as Pachgaon was a major provider of Tendu leaves earlier, and if they stopped providing the Forest Department would lose out on monetary gain from the same. But they were left with no rights because the CFR was issued. This resolution of the Gramsabha, had a positive effect on forest as the trees continues to be greener with leaves and it also stopped the theft of Tendu leaves too. Monitoring of the forest increased to avoid theft. This resolution also led to the Forest Development Corporation denying the marking of the 'Fire line' (Please add appropriate English word for जाळ राषा) because the Gramsabha refused to collect the Tendu leaves. Thus, a positive resolution by the Gramsabha, was also met with many conflict situations.

Yasmi et al (2013) describes conflicts involving an overlap between statutory and customary claims. Statutory claims are defined by state laws and recognized formally while customary claims are usually determined by stakeholders at local levels and often based on informal arrangements (FAO, 2011). Customary claims are often not recognized formally by the State though processes for recognizing these claims formally are underway in many countries (e.g., Dahal et al., 2011).

CFR illustrates a special case of formal (legal) recognition of the customary claims by the State (Indian government). The entire process is designed to legalize customary claims which were not recognized in the colonial period (See: Preamble of FRA,2006). It is thus a very complex process that involves oral as well as documentary evidence stretching across a century or more. Before FRA, the interactions between the two actors (FD and Community) were already of conflicts, with FD have a clear domination through legal power. CFR gives powers to a certain extent over space as well as resource use thus changing the nature of power equations. In addition, it gives rights of exclusion (although limited) to the community and empowers to make rules of management which puts them at par with the forest department in management. This seems to be the cause of extreme unease in the forest bureaucracy which has gotten used to unchallenged power since 1867, the making of the first Indian Forest Act.

We list below examples of conflicts noted in the study area with brief description. These are "conflict situations" which will have a common cause/s and effect/s, unfold over several months, include many conflict incidences of varying intensity and involve influencing groups along with primary and secondary stakeholders as "actors".

Analysis of conflict

Causes: The above table shows diversity of conflict situations seen in the study area. Majority of the conflict situations are between Forest Department officials and CFR holders. They are also the highest risk/severe (Type 2) as they can endanger the CFR over the forest patch. The transfer of rights and sharing agreements between the two actors has always been volatile. The reluctance on the part of the FD bureaucracy to part with or share power they held over land and resources for more than 150+ years is the main cause. Their decisions and laws were unchallenged by court as they emanated from law. However, now the CFRs are also legally supported and hence pose a legitimate challenge to the authority of FD, at least to a certain extent. Apart from this, over the years, a network of profit sharing had been created with traders in NTFPs, often with economic gains to the department. The system has been riddled with corruption as well according to some people, with the state officials benefitting personally from sale of resources. This has also been disturbed, and the local people control the economic gains, and only directly pay the tax to the State. The economic and legal power relations cause much antagonism, accentuated by past distrust, enmity. FDs attempts to stall and delay, may be due to an individual or system's lack of interest or concern about the cause. Negotiations continue, and external agencies may get involved, and take sides (traders with the people or FD as per their interests, environmental organizations as per their interests).

Conflicts within the CFR holders range from Type 1 (low) to Type 2 (high). Some CFR holders are not interested in work, but only profits and do not want cooperative actions or follow rules. The situation is complicated by social relations, economic relations within the CFR holders. Tensions, latent, unexpressed conflicts can destabilize the processes and harm the solidarity necessary for good management. The resource may be overexploited or harmed leading to overall losses. CFR holders have tried to find solutions to these issues in a democratic manner. External agencies may facilitate negotiations, while some may add fuel to the fire for personal gains. For ex. Local politicians exploited the conflict situation for personal political gains (Case study 6).

Impacts/effects of the conflict

Negative conflict: A number of negative impacts were observed: anxiety and fear, disharmony and division within social groups, distrust and high economic and environmental costs. Anxiety was most common, sometimes experienced intensely and over a number of years. Intense anxiety and fear were felt by villagers in their conflict with FD (National Park officials) in TATR. Even Pachgao villagers were extremely stressed in the early period of CFR as the forest officials were actively against the people's management of resources and filed cases as "offenders". Between 2009-2012, when the CFR was granted, when NGO mediation began, villagers' anxiety progressively increased as FD tried to stall processes, issued legal notices for breach of certain rules, did not allow activities that could potentially bring economic gains. In addition, villagers were charged with wildlife crime, threatened in different ways. FD officials in some case experienced anxiety as well especially when the situations escalated to public demonstrations. There have been cases of ground staff feeling threatened by the community.

Inter- and intra-village disharmony was another result. CFR are granted to one village and the neighbouring villagers who wanted to use the resources (legally or illegally) felt excluded. In the case of Tendu patta (Refer to Case study 3) surrounding villagers tried to take the resources from CFR areas of Pachgaon by force and there were constant confrontations with the patrolling teams. In some instances, outsiders deliberately generated social divisions within communities to deflect from the original conflict. For instance, the tendu patta traders indirectly encouraged the outside

villages to invade and take resources from Pachgao CFR. In another case, the liquor and tobacco shop owners tried to trigger rifts in community over the CFR rule banning use of liquor and tobacco among CFR holders.

Distrust of local forest bureaucracy was deeply affecting relationships between communities. In many cases, communities approached local government representatives to mediate the conflict but it did not always work. Economic losses in terms of daily wages, NTFP values also played a role in the conflict.

Positive impacts: While negative impacts of conflict were common, some positive impacts are also seen. In particular, conflict had the effect of strengthening collective action and raising awareness of the need to address overlapping instances of customary and statutory claims in some cases.

In the conflict between the community and FD, collective action emerged in the form of organized protests, advocacy by the Gramsabha (a community institution). A series of demonstrations effectively forced the bureaucracy to acknowledge the rights and approve the processes, which in turn has set a precedence for other villages. In case of Pachgaon, they learnt from the example of Mendha-lekha village (P B, Neema et al, 2008), and other villages learnt from Pachgao.

Mediation by NGO helped the villagers to prepare a rulebook by which communities opted for a collaborative management agreement and profit-sharing arrangement this avoided or reduced potential conflict situations.

Democratic processes strengthened people gained a voice and realized the strength in cooperative action. New activities of income generation have been taken up based upon the empowerment during the entire process. Conflict also generally made communities more cognizant of their rights to the land under the law and the steps they would need to take to protect these rights. By doing so, conflict reiterated the importance of keeping records, process documentation, finance and accounting, developing plans of management, evolving a mechanism to deal with conflicts within the community and with other external agencies. Community leadership learnt to negotiate for any case or issues related to their land and CFR rights. There is a increase in the participation of women and acceptance from the other men leaders in the community and it will increase in future.

The key learnings and adaptive management that evolved will be discussed in the next chapter based upon select case studies.

Photo 10: ▶ Collection and sorting of Tendu-patta in Pachgao before the decision to stop collection was made

Chapter 4

Analysis and discussion

Conflict situations pose a serious challenge to participatory management of resources and gaining sustainable livelihoods (Castro and Nielsen, 2003). In the earlier chapters a summary of conflict situations, their causes and effects has been provided. Case studies of selected conflict situations are provided for detailed understanding. Some of the conflicts have the potential to destabilize the entire process of CFR management and in turn will affect the implementation of the FRA, itself. Legal recognition of community forest rights has been a major step in decolonizing of Indian natural resource management. It is thus important to ensure that it is implemented smoothly.

A large number of studies have analysed conflict situations in resource management. Conflict is very common phenomenon not only in resource management but in any social interaction. They can have negative as well as positive impacts. It is necessary to understand how to increase the positive impacts and reduce the negative ones and in the long run prevent the conflicts altogether or resolve them amicably. A conflict left unattended, or not resolved with consensus is likely to snowball into bigger and serious conflicts as is noted in the cases in study area.

Burton (1990). in his seminal work 'Conflict Resolution as a political system" makes a clear distinction between "settling or managing" a conflict and "conflict resolution". According to him,

"Conflict resolution means terminating conflict by methods that are analytical and that get to the root of the problem. Conflict resolution, as opposed to mere management or "settlement," points to an outcome that, in the view of the parties involved, is a permanent solution to the problem"

For our purposes, conflict resolution means terminating conflict by methods that get to the root of the problem. Conflict resolution, as opposed to mere management or "settlement," points to an outcome that, in the view of the parties involved, is a permanent solution to the problem.

The process of addressing conflict can vary from negotiation to demonstration to legal procedures. A role of "third party" – influencer, mediator is also quite important and has not been sufficiently studied. Social and cultural methods of resolving conflicts exist but are not always effective owing to the changing nature of social relations and human behaviour. We examine the conflict resolution processes in this study to learn of common patterns and identify if effective mechanisms can be created in future for these and other CFR holders in surrounding areas.

Presence of certain barriers to the process of resolution were noted in the study area. These can threaten the process of long-term sustainability and hence should be carefully studied and resolved. It is necessary to institutionalize the conflict resolution mechanisms in future.

Mechanism of conflict resolution in study area

The findings from the studied cases suggest that while the causes of stakeholder conflicts are diverse, conflict of some form is highly likely when communities are granted access to the resource area which the forest department considered to be their own. As described, conflict may have both positive and negative impacts (Yasmi et al., 2009; Harwell et al., 2011). On the one hand, it can foster collective action, particularly where local institutions are already strong. On the other hand, conflict results in disharmony, distrust and violence.

A short summary of conflicts in primary stakeholders is given below

Table no 5 – Short summary of conflicts in primary stakeholders

	Pachgao	Sitarampeth	Kondhegao
Process delays	CFR approval process	Area Measurement	Area Measurement
Non–acceptance of claims	Delay of acceptance of documents	Delay of acceptance of documents	Delay of acceptance of documents
Non acceptance of working plans	Yes	Not yet designed	Not yet designed
Delays in giving licenses	Yes	Yes	Not yet in experience
Legal notices of crime	Yes – Wildlife conflict, Bamboo trade, access to CFR	Yes – Wildlife conflict	Yes – boundary marking related, grazing rights related
Profit sharing issues	Indirect (Tendu related)	Direct (Boating related)	Direct (Gate pass related)
Internal rule making	Yes	Yes	Yes (Political)

Between primary stakeholders

Five out of ten conflict situations described in the previous chapter involve the two primary stakeholders, local community and forest bureaucracy, the actors being the CFR holders and forest officials. The conflicts between these two have always existed owing to the very nature of their relations, one being the legal owner of the resource (department) and other being the actual user (local community).

Parting with rights of management and exclusion as part of grant of CFR has been the most conflict–ridden process as the very idea was new and different. It can be seen as conflict of ideologies, where earlier laws identified the forest department as the legal owner of land and resources and in–charge of protecting the resource (on behalf of state) while the local community were only the beneficiaries or users, given certain privileges in use, a state that existed since the colonial times, almost till now and still continues as Indian Forest Act and Wildlife Protection Act define the role of forest department in this case. But CFR, with its ideology of local communities holding having a "right" and not just "privileges" over the resource is against the top–down manner of functioning. The CFR provisions expect the community to also take over the function of resource and wildlife conservation, but it is seen more as a responsibility rather than duty. Respondents from forest department were not completely convinced that it can be done by the local community, or latest not in the way it is done by forest department.

The delays in the processes leading to grant of CFR are viewed as stalling the process by local community and the facilitating organization, with allegations made from both sides of derailing the process or denying the rights. Both actors view each other with suspicion and distrust which is a major barrier, which continues even after grant of CFR as can be seen from the various post-CFR conflicts. Community alleges forest department of neglect (pleas), delay (responses), denial (requests, licenses) as a strategy. While forest officials allege people of procedural mistakes, unscientific management, overexploitation and pressurizing. The various national level debates and constant challenges to FRA definitely influence the thinking of the local actors as it creates a lot of

uncertainty about future of the entire process.

Individual differences are seen within the groups. Some forest officials are more understanding and do facilitate the process in their own ways. But others may actively work against it. Even within local community, certain members may shirk the responsibilities or make mistakes that threaten the interest of the entire group.

The facilitating NGO, in these situations is working with the people, and on behalf of them, hence is mistrusted by the Forest department. In some situations, the people involved Collector and revenue department to mediate on their behalf and it did work. However, comparing this to Burton's definition above, this is merely management of conflict and not actual resolution. As long as the two primary stakeholders are antagonistic, and not united by a common cause or purpose, the conflicts do emerge in new forms. There is currently a very clear hierarchy in power which the forest department gets from legal authority and the people get from forming a pressure group. Both can quickly lose rationality and logic leading to escalating the tensions and become merely a show of power rather than resolution.

A long-term solution requires a true negotiator, which will have trust of both the actors. Organizations need to work with both the involved actors to build capacity, empower and help understand the purpose of the CFR. Sustainability of the resource can be one common purpose that can be put as a goal for all involved. One way to institutionalize resolution of these conflicts would be to create a "third party" facilitation mechanism which can mediate between the two parties. A platform for both actors to interact would be useful. At the same time, there is a need for intervention of government agencies (tribal department, revenue department) on behalf of the community, to help address the procedural and bureaucratic matters with forest department.

The process of filing claims is and requests for various licenses, preparation of working plan are fairly tedious, especially for local community not well versed with various details of the bureaucracy. Technical support groups are needed to help with this, but they need to be nonpartisan, holding trust of both actors. With the advent of ICT in rural areas digital solutions can help in future.

In case of Paachgao, the local community identified ways of making the various processes streamlined, fair and transparent. For example, creation of working plan by the people, holding auction in certain manner. These were not easily accepted by the forest department. Looking at the positive impact of these, they can be supported in other areas as well. The creation of a "sacred" "no-go" area by the Pachgaon village to protect the resource is also a welcome step that can be suggested to other CFR areas.

Another dimension of conflicts in these two actors is the presence of wildlife conflicts (conservation conflicts) in the region. In the study area, the issue of wildlife in and outside of CFR area is a source of conservation conflicts. Loss of livestock, crops, human life due to wildlife attacks puts a strain on the relationship between the two stakeholders. CFR areas continue to be forest lands and habitats for wildlife and hence the responsibility of any damage by wildlife in the area remains with the forest department. Redpath et al. (2013) has pointed out that no wildlife conflict is ever fully resolved, although it can be managed to some extent. In the study area, the solution to this has not yet been identified and the conflict is addressed as it comes. There needs to be external intervention in terms of wildlife management in this to avoid future problems.

Within CFR holders

CFR literature mentions conflict situations with forest bureaucracy. But there has not been enough

documentation of the nature of conflicts within CFR holders (local community) after receiving CFRs. The reason could be an assumption about homogenous nature of the community, united in common goal of natural resource management. This is partially true especially till the grant of CFR, which becomes a common goal in the beginning. But there are underlying tensions within the society which emerge as conflicts of interests in different cases. Not every member is as committed to common task equally. Each one is not able to express equally or participate in processes equally. The role of facilitator from outside has been important in addressing the conflicts within CFR holders in the early stages in all areas. Explaining the law, discussing the potential gains, management practices etc were described in detail and questions answered by the facilitators. This definitely helped reduce the conflicts at the start. The community united for the common goal and was able to present a united front to the forest department.

The later conflicts were unforeseen and occurred mainly due to the social and economic disparity which existed already in the community. Spending newly gained money on addictions, shirking responsibilities are natural social evils in any society. However very soon, people realized the need to self-regulate, and a rule book was created in Paachgao. Though implementation of the rules led to other problems, very soon the community learnt how to self-regulate without allowing a rift to form. This shows the adaptive learning by Paachgao community, which was made possible through long interactions and mutual understanding. In the other two villages, this step has not yet been achieved. This can be a very important step, and in fact a common rulebook can be created and circulated as a sample to other CFR holders, who can then modify it as per their needs.

The social relations in the CFR holders can cause conflicts, but they also hold the capacity to resolve them. In some cases, the community conducted mediation between conflicting individuals through relatives, friends and used social capital, which has high value in a tribal group. (*example). Influence of local religious leaders, groups also was positive for reducing conflict. Local leadership development is very important and critical part of adaptive management.

Within CFR holders and neighbouring villagers

This conflict, (case XX) was mainly owing to the power of exclusion, which was exercised by the CFR holders to keep away the neighbouring villagers from taking away resources of CFR area. The patrolling and policing of resources is seen as a forest department task. But here the community did it out of interest in protecting the resource, which is a sign of advanced management. The conflict was resolved through clear demarcation of boundaries and discussions with neighbouring village authorities. Mutually acceptable solution was found at the end. In some cases, the community took help of forest officials in punishing the trespassers.

Understanding the boundary of CFR is extremely important as seen from various types of conflicts that start over issue of boundary. Although CFR is defined in space by a map, the boundaries are not clear on the field. There are allegations of trespassing mainly owing to this. The community so far has not found a solution to this problem. This is equally important for forest department, and hence as solution can be discussed together by both stakeholders.

There is need for an innovative way of announcing boundaries, or showing the boundaries and acceptance by all. In the past, cultural methods such as placing of memorial stones, shrines, boundary marking rituals were practiced to know resource area demarcation. This practice can be tested in present times to ensure boundaries are respected.

Within CFR holders and environmental organizations

This is an interesting outcome of the various post-CFR activities going on in the region. Environmental and social NGOs are keen on helping the CFR holders and maintaining the resource and wildlife. However, the community may be subspinous of their interest or may reject their findings or suggestions due to lack of trust. The organizations are often used to working with individuals in the community, however, the circumstances change post-CFR. The gramsabha is empowered as a decision-making body, and this needs to be respected by all external agencies. Paachgao has now selected a few people to deal with the outsiders, which can help in future.

Some common learnings are given below
a. It is seen from the situations above that facilitator agencies are needed for claiming and granting of CFR as well as establishing a community management system. Currently a handful of NGOs are working in the field and their reach is limited. This creates a visible difference between villages that have NGO support versus not having mentors/ NGO support. Intervention by the tribal department and/or the revenue department officials can ensure strong support of the State to the CFR holders.
b. Gramsabha is the nodal agency to implement CFR: What matters more than having a legal and statutory status for gramsabha is having a culture of gramsabha mediated decisions. Inculcating a "gramsabha culture" in a village is a slow and difficult process. In villages having active gramsabha culture, a number of conflicts have been resolved by the gramsabha,
The same cannot be achieved by by Gram panchayat. Gram panchayats became active quickly and remain an active part of the political and developmental process is the presence of definite political gains for parties and individual gains for leaders. These potential selfish gains mainly drive the system. This has effect on gramsabha level.
c. The interaction needs to have context-based flexibility that has to come from individual wisdom on both sides. Academic groups can potentially optimize the process in the local context but for this to happen academic groups should come out of the academic formalism and should employ a context related flexible and action-oriented methodology. Forest department should take a strictly secondary and supportive role. The initiative and control should not lie with the forest department. In reality, the role of forest department is also highly variable across villages and also in time. A policy level stand needs to be taken by the department and train its personnel towards identifying conflict issues and minimizing them without diluting the purpose of CFR.
Improving the dialogue and communication, in a non-confrontational manner is required. A permanent external facilitating agency can be created or appointed for this purpose. One can think of grievance redressal system as well.
d. A clear picture of long-term goals is the necessary foundation for any conflict resolution measures. In the absence of this clarity conflict resolution becomes a matter of short-term convenience to the dominant player(s) often compromising with the long-term goals.
e. The mindset of people has changed from self-management to dependence on government since the introduction of the governance system implemented by the British, and continued with little change by independent India. As a result, the prevalent culture and mindset among people is that of passive spectators and at the most complainers. Unless giving legal rights such as those given by CFR is accompanied by a simultaneous change in the perspectives and mindsets of people, the systems of conflict resolution will not work.
f. Just as conflicts can arise in any system and any interaction of a sufficiently large number of people, a number of means of resolving the conflict issues also arise in the human society by means of inherent human instincts and common sense. Apart from formal law of a country, people have their own ways to handle conflict issues. Societal norms are more commonly used by people than formal law. Some of the societal norms are traditional while novel ones can also arise on facing novel contexts or issues and such solutions may later evolve into a tradition.

Economic aspects of conflict

Social aspects of conflict

Well managed CFR

Policy and procedure aspects of conflict

Management and action aspects of conflict

We recorded several instances where people amicably resolved conflicts between and within villages. Making gramsabha specific rules was the most common means. The rules were plastic and people were ready to change or add rules as and when they encountered a new problem. I personally feel that this is the advantage of community management. It can be more plastic and adaptive with minimum delay. In many instances gramsabhas have judged and punished individuals violating the

BOX 7: To the core of conflict

The core of the process in conflict resolution are not always legal or administrative. They are cultural and perceptional as well.   The origin of the tiger attack related conflict in Sitarampeth village lies in the perception of people towards wildlife. Owing to the way in which wildlife conservation is implemented, people's perception has changed. Nature and wildlife are increasingly viewed as a government property. Instead of viewing wild life and the occasional conflicts with them as an inevitable part of nature, it is now viewed as a threat posed by the government. People cannot be blamed for this change in perception. It is the policy with which forest and wildlife conservation programmes are implemented, that has driven the change. For example, after the tiger attack incidence, in a meeting of forest department officials with the villagers, the villagers suggested their own interpretation about the causes of increased conflict. They reasoned that a solar powered fence that the forest department installed to protect plantation on an area, has changed the traditional movement corridors of animals. Now animals are forced to move closer to the village and areas of people's activities. This change has increased incidences of conflict.

Instead of treating this as a hypothesis, the forest department officials ridiculed and discarded the hypothesis straightaway. If we analyse the origin of this conflict, to begin with the plantation should have been initiated in consultation with people. If people had the choice over area to be planted, the tree species to be planted and the protection measures to be applied, it would have become people's responsibility as well. In that case, they would have been responsible for the consequences, if any, of the decision. Even if there was any harmful consequence of the decision, people's reaction would have been to think and introspect rather than blame the department.

rules. The nature of the punishment was a fine, or preventing the person from utilizing a common resource for variable time and at times confiscating the equipment needed for usurping the resource.

Interestingly if asked, people do not know the legality about what kinds of punishments the gramsabha is entitled to give but in the over a dozen instances of such punishment for breaking the rules that we recorded, no one challenged the authority to punish. This also applied to punishing people outside the village who tried to collect some resource from the CFR area of a village. So far there does not seem to be any case where the authority of the gramsabha has been challenged by anyone. People seem to accept the punishment without challenging it. But it is not clear what would law say if someone challenges the gramsabha authority.

Evolved versus designed/induced solutions: In pachgao Solutions to disputes and conflicts evolved through repeated discussions, trial and error and collective thinking. This is a long process and takes variable amount of time. I can witness this as an ongoing process. But on the other hand, some solutions need to be designed and induced or implemented, which may or may not involve an external agency such as an academic group or NGO.

Some challenges require a solution at a higher level. One village might be too small to handle certain types of conflicts. For example, in Gadchiroli district, several gramsabhas together opposed the mining lobby. After having come together for this fight, the organization could be used towards many constructive purposes. For example, they could together establish market links, conduct auctions of NTFP collection and thereby get a higher value to the product. A number of activities such as training, workshops, joint action policy are possible at a level of organization higher than gramsabha. However, this organization should evolve bottoms up. A top down approach is less likely to work.

A major hurdle in community management, particularly near wildlife areas is the complex interaction with the FD personnel. There have been instances of extremely pro-people approach by certain officers and a hostile approach by others. The origin of the conflict lies mainly in the difference in the perspective and understanding of CFR. Joint workshops and brainstorming's to bring together FD, Tribal welfare department and people in an attempt to understand each other's perspective are needed. Such meetings need to be conducted periodically for updation as well as to keep continuity in spite of transfers of the staff.

The resolution mechanisms tried and tested in the study area provide interesting insights into the adaptive management processes. The local community has definitely learnt handling internal and external conflicts, but some are beyond their powers to resolve. As against this Forest Department's adaptive learning has been slow, and their response has mainly been to manage or resist changes in most situations. More thoughts need to be put into the creation of a mediator, or facilitator within the department, who can ensure a consistent response in all situations which will further the common interests in the region. A change in attitude and human behaviour is required and may be slow to come.

Chapter 5

Conclusion and way forward

The Forest Rights Act has taken a historic step to support community-based conservation and management by recognizing community rights to "protect, regenerate, conserve and manage" any community forest resource (CFR) for sustainable use. There has been strong opposition to the act from some environmental organizations, but many have come out to support it as a potential mechanism to sustainably use the forest resources.

Several studies have discussed examples from India and analysed the problems faced by the communities claiming CFRs. But few studies have looked at processes that happen after the grant of CFR and almost no documentation exist on conflicts and adaptive mechanisms in management of community forests under CFR. Our small studied showed several types of conflicts between stakeholders in the selected villages.

Extensive listing of the possible sources of conflict should not be interpreted to mean that CFR is prone to many conflicts and therefore is a bad policy. Conflicts with other policies have not been studied in sufficient details. The effort to list all possible sources of conflict is intended to make the system more robust and sounder. This is possible by addressing every problem rather than ignoring them. It can be viewed as living and ever evolving framework in term of methodology and conflict resolution practice improving strategies.

Some conflicts are natural inevitable and positive part of development and other change processes this attempt is to identify various types and frequency of the conflicts, conflicting objectives that exists in almost all villages.

The findings from the studied cases suggest that while the causes of stakeholder conflicts are diverse, conflict of some form is highly likely when communities are granted access to the resource area which the forest department considered to be their own. The community was seen to learn from the situation and create working processes that will prevent conflicts in future. The role of external facilitator was seen to be important, at least in the early phases.

Present study has identified groups within stakeholders and presented a list of possible conflicts within the groups. In future, this can be used as part of the CFR guidance mechanism that will help identify possible sources of conflict. Early detection will be useful for the various agencies involved to create fair and transparent mechanisms to avoid conflicts.

Creation of rules and regulation manual, identification of community level facilitators as a formal position, identification of common written protocols for the interaction between the stakeholders can smoothen the processes.

The key learnings and adaptive management that evolved were as follows:
a. Need of facilitator agencies – so far various NGOs have played this role. Their ideology and inclinations are a major factor that can influence the outcomes of facilitation. Trust is an important factor and the NGOs to be non-partisan is necessary.
b. Inculcating a "gramsabha culture" in a village – gramsabha is specially empowered in the CFR, but not all the villages will have a strong one, at least at the beginning. It may even be influenced by social hierarchy, gender bias and may not be truly representative due to some reason. This will harm the progress of the CFR process and needs to be strengthened as part of the first steps.
c. Training of the department personnel towards identifying conflict issues and minimizing them without diluting the purpose of CFR. – this is extremely necessary as stakeholders with very diverse views, cultures and opinions are interacting in this process. Management training should be given to create a consensus and the entire process should be formally incentivised.
D. Need of grievance redressal system is observed. Tribal welfare department and people in an attempt to understand each other's perspective are needed.

Some other suggestions are given below
1. Providing clear understanding of the law and its effects beyond the "rights"
2. Creating village level framework for conflict resolution
3. Training of CFR facilitators from government agencies and organizations.
4. Training of forest department ground staff in understanding the law and community requirements
5.. Rights and responsibilities of gramsabha should be well defined

In conclusion, it should be seen as a common goal of the society to ensure sustainability of the CFR as a process and not just that of the community.

References

1.   Arnold, J. S., Koro-Ljungberg, M., & Bartels, W. (2012). Power and Conflict in Adaptive Management: Analyzing the Discourse of Riparian Management on Public Lands. Ecology and Society, 17(1). doi:10.5751/es-04636-170119

2.   Bijoy, C R. (2020). Why Is the Government Afraid of Implementing the Forest Rights Act?

3.   D'Armengol, L., Castillo, M. P., Ruiz-Mallén, I., & Corbera, E. (2018). A systematic review of co-managed small-scale fisheries: Social diversity and adaptive management improve outcomes. Global Environmental Change, 52, 212-225. doi:10.1016/j.gloenvcha.2018.07.009

4.   Dietz, Thomas & Ostrom, Elinor & Stern, Paul. (2004). The Struggle to Govern the Commons. Science (New York, N.Y.). 302. 1907-12. 10.1126/science.1091015.

5.   Dubey, Sanghamitra & Dash, Tushar & Sahu, geetanjoy. (2017). Political economy of Community forest rights. Economic and Political Weekly. Volume-52.

6.   Etkin, N. L. (n.d.). Integrating ethnographic and ecological perspectives for ethnopharmacology field research. In 1141459272 859422090 T. Ticktin (Ed.), ETHNOPHARMACOLOGY (2009 ed., Vol. 1, pp. 99-117). EOLSS Publications.2009.

7.   Hellstrom, E. (2001). Conflict cultures – Qualitative Comparative Analysis of environmental conflicts in forestry. Silva Fennica. 2-109.

8.   Hess, Charlotte. 2008. "Mapping New Commons." Presented at The Twelfth Biennial Conference of the International Association for the Study of the Commons, Cheltenham, UK, 14-18 July.

9.   Kashwan, Prakash. (2020). FOREST GOVERNANCE IN INDIA: COLLECTIVE RIGHTS AND CLAIMS IN THE FOREST RIGHTS ACT.

10.   Keith, D. A., Martin, T. G., Mcdonald-Madden, E., & Walters, C. (2011). Uncertainty and adaptive management for biodiversity conservation. Biological Conservation, 144(4), 1175-1178. doi:10.1016/j.biocon.2010.11.022

11.   Khosla, Ayesha. (2020). Can Forest Rights Act be the Much Needed Transformative force for the tribals in Tripura?.

12.   Williams, B. K. Lele, Sharachchandra. (2019). THEMATIC ESSAY: Understanding Current Forest Policy Debates through Multiple Lenses: The Case of India. 21-30. 10.37773/ees.v2i2.71.

13.   Mcginnis, Michael & Ostrom, Elinor. (1996). Design Principles for Local and Global Commons. 2.

14.   Münster, Ursula & T.R, Suma. (2012). In the Jungle of the Law: The Implementation of the Forest Rights Act in Kerala. Economic and political weekly. 47. 38-45.

15.   Nayak 2001 Working paper Adaptive Community Forest Management: An Alternate Paradigm. "Politics of the Commons: Articulating Development and Strengthening Local Practices", Chiang Mai, Thailand from 11 – 14 July, 2003

16.   OECD (2012), "Conflict analysis and its use in evaluation", in Evaluating Peacebuilding Activities in Settings of Conflict and Fragility: Improving Learning for Results, OECD Publishing, Paris

17.   Pattnaik, Sonali & Sahoo, Hemanta. (2016). Visibility of women's forest rights assertion and livelihoods in the context of Forest Rights Act in India.

18.   Pathak Broome, Neema & Rai, N.D. & Tatpati, Meenal. (2017). Biodiversity conservation and forest rights act. Economic and Political Weekly. 52. 51-54.

19.   Pathak Broome, Neema & Taraporewala, Erica & Wani, Milind & Bose, Arshiya & Kothari, Ashish. (2008). Towards Self-Rule and Forest Conservation in Mendha-Lekha Village, Gadchiroli.

20.   Pohl, Christian & Rist, Stephan & Zimmermann, Anne & Fry, Patricia & Schneider, Flurina & Ifejika Speranza, Chinwe & Kiteme, Boniface & Boillat, Sébastien & Serrano, Elvira & Hirsch Hadorn, Gertrude & Wiesmann, Urs. (2010). Researchers' roles in knowledge co-production: Experience from sustainability research in Kenya, Switzerland, Bolivia and Nepal. Science &

Public Policy - SCI PUBLIC POLICY. 37. 267-281. 10.3152/030234210X496628.

21.   Recognition of community rights under Forest Rights Act in Madhya Pradesh and Chhattisgarh: Challenges and way forward: Final report July 2011. (2012). New Delhi, India: United Nations Development Programme.

22.   Regeer, B. & Bunders, Joske. (2009). Knowledge co-creation: Interaction between science & society. A transdisciplinary approach to complex societal issues.

23.   Ruiz-Ballesteros, E., & Gual, M. A. (2012). The Emergence of New Commons. Human Ecology An Interdisciplinary Journal, 40(6), 847-862. doi:10.1007/s10745-012-9540-1

24.   Savyasaachi, Savyasaachi. (2011). Forest Rights Act 2006: Undermining the foundational position of the forest. 46. 55-62.

25.   Sivaramakrishnan A, John J (2014) Natural resource governance by Panchayati Raj Institutions: issues and opportunities. In: Paper presented at 'Governing Shared Resources: Connecting Local Experience to Global Challenges, the Twelfth Biennial Conference of the International Association for the Study of Commons', Cheltenham England. Available at: https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/1804/Sivaramakrishnan_107801.pdf?sequence=1&isAllowed=y

26.   Springate-Baginski, Oliver, Madhu Sarin, S. Ghosh, Purnamita Dasgupta, I. Bose, A. Banerjee, Kailas Sarap et al. "The Indian Forest Rights Act 2006: Commoning Enclosures." In 12th Biennial Global Conference of the International Association for the Study of the Commons (IASC), held in Cheltenham, UK, pp. 14-18. 2008.Tatpati, M. (Ed). (2015). Citizens' Report 2015: Community Forest Rights under the Forest Rights Act. Pune, Bhubaneshwar and New Delhi: Kalpavriksh and Vasundhara in collaboration with Oxfam India on behalf of Community Forest Rights Learning and Advocacy Process.

27.   Thompson, J. R., Elmendorf, W. F., Mcdonough, M. H., & Burban, L. L. (2005). Participation and Conflict: Lessons Learned from Community Forestry. Journal of Forestry, 103(4), 174-178. doi:10.1093/jof/103.4.174

28.   Van Laerhoven, Frank & Andersson, Krister. (2013). The Virtue of Conflict: An Institutional Approach to the Study of Conflict in Community Forest Governance. International Forestry Review. 15. 122-135. 10.1505/146554813805927219.

29.   White, R. M., Fischer, A., Marshall, K., Travis, J. M., Webb, T. J., Falco, S. D., . . . Wal, R. V. (2009). Developing an integrated conceptual framework to understand biodiversity conflicts. Land Use Policy, 26(2), 242-253. doi:10.1016/j.landusepol.2008.03.005

30.   Zaidi, Mubashira. (2019). Tribal women's empowerment through the Forest Rights Act, 2006 in southern Rajasthan. Asian Journal of Women's Studies. 25. 47-75. 10.1080/12259276.2019.1565637.

31.   Pathak, N., & Kothari, A. (2009). (rep.). Indigenous and Community Conserved Areas: The Legal Framework in India. IUCN. Retrieved from https://www.iucn.org/downloads/india_3.pdf.

32.   A joint committee of The Ministry of Environment and Forests and the Ministry of Tribal Affairs. (2010). (rep.). Report by National Committee on Forest Rights Act. Retrieved from https://slic.org.in/uploads/2020/05-May/22-Fri/fra-committee-report-final-dec-2010.pdf.

33.   Maharashtra CFR-LA, 2017. Promise and Performance: Ten Years of the Forest Rights Act in Maharashtra. Citizens' Report on Promise and Performance of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. Produced by CFR Learning and Advocacy Group Maharashtra, as part of National Community Forest Rights-Learning and Advocacy Process (CFR-LA). March 2017. (www.fra.org.in),

34.   Matiru, V.; FAO, Rome (Italy). Forestry Dept. eng; Hart, N. (ed.); Castro, P. (ed.); Conflict and natural resource management. Retrieved from https://agris.fao.org/agrissearch/search.do?recordID=XF2016079522.

35.   The Food and Agriculture Organization of the United Nations; Conflict in community: managing conflicts in areas with livestock, farming and wildlife; Retrieved from https://www.fao.org/3/i0821e/i0821e05.pdf

36.   Warner, M. (2017). Conflict Management in community-based natural resource projects:

Experiences from the Lakekamu Basin Integrated Conservation and Development Project, Papua New Guinea. Biodiversity and Ecological Economics, 196–219. https://doi.org/10.4324/9781315096308-12

37.	Mack, N., & Woodsong, C. (2005). Qualitative research methods: A Data Collector's field guide. FLI.

38.	Mueller, R. A. (2019). Episodic narrative interview: Capturing stories of experience with a methods fusion. International Journal of Qualitative Methods, 18, 160940691986604. https://doi.org/10.1177/1609406919866044

39.	Domnişoru, F. S. (2013). NARRATIVE TECHNIQUE OF INTERVIEWING. Bulletin of the Transilvania University of Braşov, Series VII: Social Sciences and Law, 6(1), 21–28.

40.	Bandi, Malwandla. (2016). Forest rights act: Is there an underlying pattern in implementation?. Economic and Political Weekly. 51. 16-17.

41.	Chandra, Rajshree. (2019). Forest Rights Act of India: putting indigeneity in place. Indian Law Review. 3. 1-21. 10.1080/24730580.2019.1639422.

42.	Chitwadgi, S.. (2008). VIEW POINT ON RECOGNITION OF FOREST RIGHTS ACT AND EFFECTS ON FOREST GRAZING. Range Management and Agroforestry. 29. 66-66.

43.	Choudhury, Dhrupad. (2014). The Forest Rights Act, Northeast India, and Shifting Cultivators. 10.1093/acprof:oso/9780198099123.003.0010.

44.	Conroy, Czech & Mishra, Abha & Rai, Ajay. (2002). Learning from self-initiated community forest management in Orissa, India. Forest Policy and Economics. 4. 227-237. 10.1016/S1389-9341(01)00068-5.

45.	Das, Smriti & TYAGI, N.. (2019). Pathways to institution and resource sustainability: lessons from the Forest Rights Act implementation in India. International Forestry Review. 21. 279-294. 10.1505/146554819827293204.

46.	Fanari, Eleonora & Pathak Broome, Neema. (2019). The Status of the Forest Rights Act in Protected Areas of India. The Indian Journal of Social Work. 80. 461. 10.32444/IJSW.2019.80.4.461-476.

47.	Hammersley, M. and Atkinson, P. (2007) Ethnography: Principles in Practice (Third Edition), London and New York: Routledge.

48.	Lee, Jocelyn & Wolf, Steven. (2018). Critical assessment of implementation of the Forest Rights Act of India. Land Use Policy. 79. 834-844. 10.1016/j.landusepol.2018.08.024.

49.	Ramnath, Madhu. (2008). Surviving the Forest Rights Act: Between Scylla and Charybdis. Economic and Political Weekly. 43. 37-42. 10.2307/40277205.

50.	Roy, Antara & Mukherjee, Sroyon. (2008). The Forest Rights Act, 2006: Settling Land, Unsettling Conservationists.

51.	Roy,S.B.(1995).Experience for Participatory Forest Management.InterIndia Publication:New Delhi.

52.	Sahoo, Hemanta & Pattnaik, Sonali & deo, Bibhore. (2015). An Insight into Women Rights in the purview of Forest Rights Act.

53.	Sahu, G. (2020, May 2). Implementation of Community Forest Rights Experiences in the Vidarbha Region of Maharashtra. Economic & Political Weekly. Retrieved from https://www.epw.in/journal/2020/18/special-articles/implementation-community-forest-rights.html

54.	Saravanan, Velayutham. (2018). Impact of Forest Rights Act, 2006. 10.1007/978-981-10-8052-4_6.

55.	Sen, Amrita & Pattanaik, Sarmistha. (2019). The political agenda of implementing Forest Rights Act 2006: evidences from Indian Sundarban. Environment, Development and Sustainability. 21. 10.1007/s10668-018-0138-7.

56.	Sharma, Anjoo. (2017). The Indian Forest Rights Act (2006): A Gender Perspective. Antyajaa: Indian Journal of Women and Social Change. 2. 48-64. 10.1177/2455632717716258.

57.	Tiwari, Shailendra & Vyas, Vivek. (2009). Operationalisation of Forest Rights Act 2006 in Udaipur.

58.   Vira, Bhaskar & Jeffery, Roger. (2001). Analytical Issues in Participatory Natural Resource Management. 10.1057/9781403907677.
59.   Guha, R. (1985). Scientific Forestry and Social Change in Uttarakhand. Economic and Political Weekly, 20(45/47), 1939–1952. http://www.jstor.org/stable/4375015
60.   Kohli, K. (2019). Historical injustice and "Bogus" claims: Large infrastructure, conservation and forest rights in India. https://in.boell.org/en/2019/06/07/historical-injustice-and-bogus-claims-large-infrastructure-conservation-and-forest-rights
61.   Walters, Carl & Hilborn, Ray. (1978). Ecological Optimization and Adaptive Management. Annual Review of Ecology and Systematics. 9. 157–188. 10.1146/annurev.es.09.110178.001105.
62.   Walters, C. J., & Holling, C. S. (1990). Large-scale management experiments and learning by doing. Ecology, 71(6), 2060–2068. https://doi.org/10.2307/1938620
63.   NSW Department of Planning and Environment (https://www.dpie.nsw.gov.au/)
64.   Williams, B. K. (2011). Adaptive management of natural resources—framework and issues. Journal of environmental management, 92(5), 1346–1353.
65.   Kapavriksha. (2021). (publication). : The Making of a Tiger Reserve: A Study of the Process of Notification of Tiger Reserves. (https://kalpavriksh.org/wp-content/uploads/2022/02/Tiger-reserve-process-violations-study-final.pdf)
66.   Abu-Nimer, M. 2001. Conflict resolution, culture, and religion: towards a training model of interreligious peace building. Journal of Peace Research 38 (36): 685-704.
67.   Swaminathan, S. 1999. Time, power, and democratic transitions. Journal of Conflict Resolution 43 (2): 178-191.
68.   Agrawal, A., Gibson, C., 1999. Enchantment and disenchantment: the role of community in natural resource conservation. World Development 27 (4), 629–649.
69.   FAO, 2011. Reforming Tenure: Issues, Principles and Process. FAO Forestry paper No. 165. FAO, Rome.
70.   Dahal, G.R., Atkinson, J., Bampton, J., 2011. Forest Tenure in Asia: Status and Trends. EFI, RECOFTC and EU, Kuala Lumpur
71.   Schlager, E., & Ostrom, E. (1992). Property-rights regimes and Natural Resources: A conceptual analysis. Land Economics, 68(3), 249. https://doi.org/10.2307/3146375
72.   Castro, A. P., & Nielsen, E. (Eds.). (2003). Natural resource conflict management case studies: an analysis of power, participation and protected areas. Rome: Food and Agriculture Organization of the United Nations.
73.   Burton, J. W. (1990). „Conflict Resolution as a political process. Working paper 1 Center for Conflict Ana lysis and Resolution George Mason University New York
74.   Yasmi, Y., Guernier, J., Colfer, C.J.P., 2009. Positive and negative aspects of forestry conflict: lessons from a decentralized forest management in Indonesia. International Forestry Review 11 (1), 98–110.
75.   Harwell, E., Farah, D., Blundell, A.G., 2011. Forests, Fragility and Conflict: Overview and Case Studies. Program on Forests (PROFOR), Washington, D.C.
76.   Williams, Byron. (2010). Adaptive management of natural resources—framework and issues. Journal of environmental management. 92. 1346-53. 10.1016/j.jenvman.2010.10.041.
77.   Abu-Nimer, Mohammed. (2001). Conflict Resolution, Culture, and Religion: Toward a Training Model of Interreligious Peacebuilding. Journal of Peace Research - J PEACE RES. 38. 685-704. 10.1177/0022343301038006003.