

## **Adaptive Management practices in the governance of CFR areas in Tadoba TR buffer**

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**Area of research:** Local Democracy

**Reference Application number:** APU/2020/00202/0241

**Aim:** Understanding the processes of adaptive management of the CFR area in Tadoba TR Buffer (=New Commons) with special emphasis on documenting conflict resolution among various stakeholders of the forest resource

### **Introduction:**

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). 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. In some cases, 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.

CFR areas and their management in Maharashtra is well studied (Citizens report 2015). CFR management by Mendha Lekha and Pachgao villages in Vidarbha are documented extensively by researchers. 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) These have proved as models for several other tribal villages who have also obtained CFRs and have started management on their own. One of the most laudable achievement of these villages is the building of institutions of sustainable management, with gram-sabha and various issue-based committees which are inclusive in nature (Sivaramakrishnan A, John J (2014).

I am personally working in this Tadoba-Andhari Tiger reserve buffer area since last 7 years with a focus on crop depredation related human-animal conflicts. While interacting with local communities, I observed the way discussions and deliberations are made over variety of conflicts and communities'

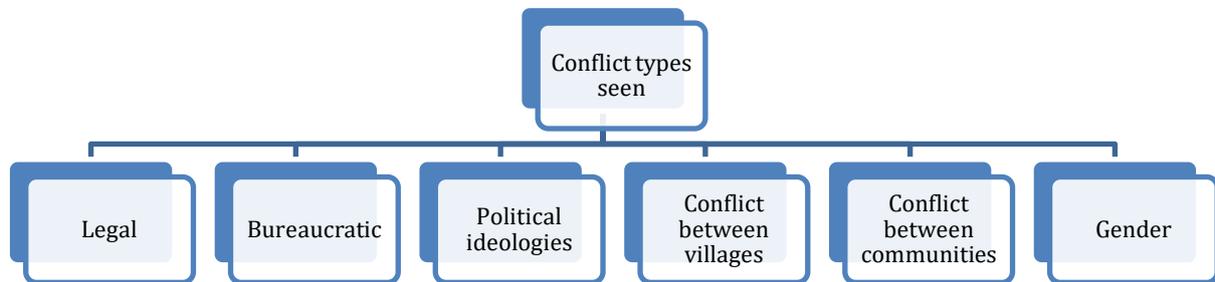
perspectives in addressing natural resource conflicts. In the past the conflicts have led to bitter rivalries among stakeholders. There are examples of violent interactions as well. But over the years people have settled the disputes through adaptive management practices and reached amicable solutions. (Arnold, J. S., et al. (2012), Keith, D. A., et al., (2011) This has been extremely important for adaptive management of the CFR areas, as decisions are made after varied consultations and discussions among stakeholders. There are variety of ways in which communities can settle conflicts, make internal rules and norms for management which prevent such conflicts. Conflicts that can be seen have not been adequately documented or theorized in the research in this area so far. In view of this, present **project is proposed for understanding the processes of adaptive management of the CFR area in Tadoba TR Buffer** which are *new commons*, for which regulations are dynamically evolving. **Our emphasis will be on documenting conflict resolution among various stakeholders of the forest resources and developing a model which can help other villages** who have newly gained CFR rights to manage the CFR areas better.

### **Literature review and gap identification**

Right from the conception stage the impacts of FRA on tribal livelihood, food security, economics and the environmental impact have been debated, many wildlife and conservation groups having opposed it for the fear of large-scale deforestation (Pathak Broome, Neema et al. (2017), Springate-Bagins et al. (2020). Roy et al. (2008). 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. They have established potentially replicable models of successful implementation of CFR but comparative studies that analyse the factors that can potentially determine the success or failure are scanty (Tatpati, 2015).

Participatory governance of natural resources has been widely advocated by in different parts of the world (Vira & Jeffery, 2001), but it has its own merits and demerits. Competition for resources, varied belief systems and other institutional factors can lead to conflicts over natural resources (Hellstrom, 2001) 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)

Importance of empowering a gram-sabha to resolve conflicts is considered crucial for sustainability. At the same time the role of external agencies in helping the gram-sabha and mediating in the conflict resolution among communities has also been emphasized (Roy, 1995; Laerhoven, 2013)



The legal, political, bureaucratic hurdles and conflicts have received substantial attention, but conflicts within communities receive only marginal attention (Tatpati, (2015), Bijoy, C R. (2020), Kohli K. (2018), Final report (2012)). Anecdotally, a number of conflicts have been witnessed by people working in this area based on which we can primarily list the major categories of conflicts as

(i) Legal: These are highly variable based on land records, vagueness of definitions, variability of understanding and interpretation by local administration, awareness within local communities, role of NGOs, academics and other external inputs (Tatpati, 2015)

(ii) Bureaucratic: In many places, despite being granted CFR, its execution, demarcation and implementation is shadowed by bureaucratic problems in the interaction of people mainly with the Forest department.

(iii) Political ideologies: (Kohli K. (2018), Tatpati, 2015) claim that dominant political ideologies of a state interact with the process of CFR implementation in very unexpected ways. CFR has been interpreted differently by left and right wing ideologies and this is one of the reasons for the large variance across states

(iv) Conflict between villages: often different villages have been using common stretches of forest lands. There have been several instances when one village, having obtained CFR, tried to protect the resources from this land and entered into conflict with other villages that were also occasionally collecting NTFP from this forest.

(v) Conflict between communities: Different communities often utilize the same resource for different purpose, and they need to settle the norms of use, in the absence of which conflicts can potentially ensue. Of importance are the nomadic pastoral communities and the settled ones.

(vi) Conflict within villages/communities: CFR entrusts most decision powers to gram-sabhas, which may challenge the resource monopoly of some individuals under certain contexts. There are documented or undocumented instances of such within community or within village conflicts

(vii) Potential 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 external agencies involved in conflict resolution are the law-and-order system in the form of police, state administration and judiciary. If, when and how people use the limited local power effectively, how they avoid or manage conflict related issues can guide other CFR users. The lessons learnt by people and internalization of the solutions to conflict are important steps that will help in sustainable and equitable management of CFR. Though overall positive and negative impacts of commons management are known and discussed in research, the underlying processes which are dynamic and ever evolving and their impact on management will be documented in this project. Optimization of the interaction between the decentralized and centralized governance will be essential for large scale implementation of CFRs. The optimization can be enabled by collective experiences from multiple contexts.

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. There is need of systematic documentation, data organization, collective comparative analysis to look for common principles and local peculiarities from a conflict management perspective. Studying the dynamics of such conflicts resolution and the democratic process by which these solutions are reached by the people is important to make the CFR policy successful over large areas.

## **Objectives**

- 1) **Documentation of conflict resolution among various stakeholders of the forest resource-** has two parts as follows
  - 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-** has two parts as follows
  - a) Identifying key learnings from the selected CFR areas
  - b) Devising a generalised framework as guidelines for other CFR areas based on key learnings

## Methodology:

Maharashtra is among the leading states to have implemented FRA, 2006 in many tribal districts. Chandrapur district in the Vidarbha region has received 425 approved community CFRs as of Feb 2020. Tadoba-Andhari is an important tiger reserve in Maharashtra and has one of the largest populations of tigers in the state.

**Study Area :** Vidharbh (Tadoba-Andhari Tiger Reserve Buffer)

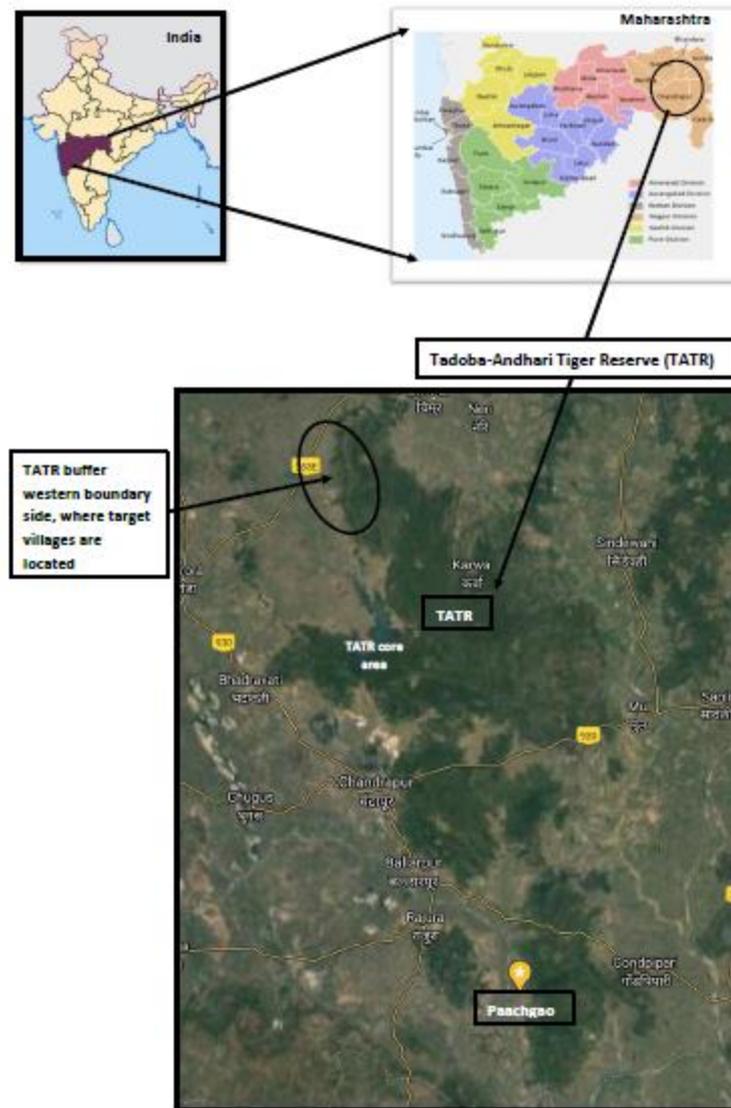


Figure 1 Tadoba buffer western boundary side, where target villages are located

Western boundary buffer of TATR is unique as the boundary between forest cover and agricultural lands represents a rather sharp ecotone. Forest cover in majority of the area ends abruptly. There are 18 villages in western boundary buffer viz. Bembla, Nimdhela, Waygaon, Kinhala, Ashta, Arjuni,

Wadhala, Ghosari, Mudholi, Tekadi, Khutwanda, Villoda, Katwal, Kokewada, Kondhegaon, Sitarampeth, Bhamdheli and Moharli.

Buffer area of Tadoba TR in Chandrapur district has 6 identified blocks, all inhabited by tribal communities. Around 25 CFR are sanctioned in this region and they are under various stages of implementation. Some are in the claim acceptance stage, some are in management plan stage while some are in monitoring and resource management stage.

In Chandrapur district, Pachgaon village has been actively managing CFR since last eight years and offers a good model to study successful handling of various conflicts arising among different stakeholders and their resolution through democratic processes. Pachgaon village has successfully implemented sustainable harvesting of Bamboo and is considering harvesting of other forest produce like tendu. The manner in which Pachgaon villagers takes management decisions, participatory methods used and internalization of the democratic processes in decision making have been noted by various researchers. But there is no study on processes of adaptive management that have been part of management in Pachgaon village.

In addition to Pachgaon there are more villages in the TATR buffer who have gained CFR and are required to manage their natural resources in sustainable manner. Key learnings from Pachgaon will be useful for them as well.

In the proposed project, the area of intensive study will be the CFR villages in the area of Tadoba-Andhari Tiger Reserve (TATR). Under intensive study we will work with people through various stages of the implementation process, experiencing and documenting the entire process with emphasis on potential conflicts, their prevention, development, mitigation or otherwise. The extensive study at its end, plans to offer a framework that can help early detection and prevention of the conflicts.

**The list of CFRs considered for documentation:**

<b>Sr.no</b>	<b>District</b>	<b>Full name of claimant</b>	<b>Hectare</b>	<b>CFR declaration date</b>
1	Chandrapur	Gramsabha-Sitarampeth	650.16	21-06-2016
2	Chandrapur	Gramsabha - Kondhegao	148.87	21-06-2016
3	Chandrapur	Gramsabha - Devada	55.04	27-06-2017
4	Chandrapur	Gramsabha – Pachgaon	1000	16-06-2012

(Pachgaon successfully demonstrated the economic trade building of bamboo and simultaneously keeping ban on Tendu patta collection.)

## **Research Design: Framing of research questions and justification**

The study will be exploratory and descriptive in nature. A detailed description of processes that led to the granting of CFR for Pachgaon area and the post CFR management practices will be made. A timeline will be prepared for the same. A similar process description will be done in other selected villages, which have been granted CFRs in the last 4 years. Pachgaon being one of the most successful examples of CFR management will be useful for comparison with other villages.

The documentation will include special focus on the sources of conflicts in selected CFR areas. The specific questions are listed below.

The starting set of questions for this study would be

- (i) What was the nature and frequency of conflicts over CFR areas?
- (ii) Who were the “actors” among stakeholders in the development of conflict?
- (iii) What was the social/political context for the conflict?
- (iv) What were the consequences of the conflict? (e.g., on livelihoods, on resource base?)
- (v) How did the community deal with the conflict and was it through local democratic processes?
- (vi) 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.
- (vii) The nature and frequency by which various solutions (amicable or otherwise) are applied
- (viii) Whether personal relations within or between communities or stakeholders play a role in conflict resolution and long-term solutions
- (ix) How does adaptive management get institutionalized in the process?
- (x) Ultimately can there be a generalized model/framework that can be suggested

## **Methodology:**

Qualitative methods will be used for collecting information for this study. The background information about the CFR areas will be collected from secondary sources and information from the local stakeholders through PRA methods. Observations, interviews and focus group discussions will be the main methods of data collection.

Field assistants from the communities will be identified for getting associated information relevant to the questions. Systematic steps leading the information gathering with a given set of objectives using above stated methods including questionnaire surveys, individual interviews and small group discussions are the key features of the project

### **Collection of background information:**

Before going to the field, background information related to the CFR will be collected from the following sources:

- The information regarding population, households and geographical information was collected from the gram-panchayat
- CFR area maps and various resource right areas from gram-sabha and Forest Department
- Socio-economic information from government records
- Other ecological data from the published literature and records of Forest survey of India
- Collection of original copies of CFR, records and other cross verification.

### **Collection of information in field:**

I have been working in the area for past 7 years and have developed rapport with the community as well as other officials through extensive work. Hence the data collection of ethnographic data (Etkin, N. L. (2009), Thomson J. R et al., 2005) and in-depth interviews will be possible. In this, I will bring together various stakeholders, enable conversations among them, identifying conflict areas and hurdles. The learning of community along with external agencies will be studied. My approach will be of participatory appraisal Representatives from the communities, and different stakeholders and external agency (NGO) involved in CFR management in the region will be contacted. In-depth interviews will be conducted for getting answers to various questions. Apart from this, I will be attending various gram-sabha meetings to observe the discussions first-hand. Secondary sources of information such as minutes of previous meetings, recordings and other audio-visual material will be collected and analysed.

In each village key respondents will be identified to represent the information of the community (about 5 per village including marginal groups and women). They will be interviewed either individually or through Focus Group Discussions, carried out in groups using PRA methods. Transect walks and semi-structured interviews of selected people and filling up of questionnaires field assistants will be used to collect data to support information from key individuals and other stakeholders.

The methodology would consist of collecting details of the process involved in CFR management with special concern to conflicts from villages which are at various stages of CFR and with varying rates of success. The details will be collected by taking oral histories, recording the views of individuals who have played different roles in the conflict, along with detailed background information of each of the parties in the conflict. With the consent of the respondent, the interviews can be recorded. It would be inevitable that the individual stories will come 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 project will offer documentation related to typical interactions in the dynamics, the inevitable versus avoidable components of the conflict and the crucial roles played by key persons and key factors in the conflict resolution, wherever applicable. A timeline will be prepared to develop chronological sequence of various management steps, conflicts and resolution mechanism tried. The ultimate aim would be to construct an interactive model describing the core reasons of the conflicts and preventive and mitigation measures which have been used or suggested by the community.

### **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)
- 4) Trans-disciplinary methods of qualitative research, Observations, interviews of key "actors", (with various stakeholders- community members, NGO, Forest Department, Traders) using tools.
- 5) Data collection will include 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.

I will be using 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, building narratives is planned.

The next step will be analysis of the conflict by the CFR holders for which a matrix depicting various agencies involved and the intensity of conflicts (a scale) will be used.

At the same time mechanism of adopting resolution practices will be understood from various people. The number of conflicts over issues and over time will be noted, and the way they are resolved, either internally or externally, through mediation or legislation etc will be noted. This will be of use later in offering a framework that can help early detection and prevention of the conflicts. We hope to use trans-disciplinary methods of study which are designed specifically for community-based interventions.

I am planning to undertake a comparative analysis to come out 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 will be a useful guide

for all and will offer a tool of adaptive management that can help the CFR holders to achieve success. Such inferences can be very useful in planning and policy making in the long run.

**Time line: (with outcomes of phases) -**

Planned phases	Activities/ Outcome proposed	Explanation	0-9 months	9-12 months
Field Work	<ul style="list-style-type: none"> <li>• CFR area visits and stakeholder meetings.</li> </ul>	Understanding of Conflict nature and frequency, actors, social and political context	+	+
	<ul style="list-style-type: none"> <li>• Documenting roles, meetings and solutions</li> </ul>			+
Referencing and analysis	<ul style="list-style-type: none"> <li>• Reading analysis observations and collation, research design, texts, images and their interpretation.</li> </ul>		+	
	<ul style="list-style-type: none"> <li>• Analysis of ethnographic data</li> <li>• Effectiveness and impact analysis</li> </ul>			+
Information and development for framework	<ul style="list-style-type: none"> <li>• Identifying key learnings from the selected CFR areas</li> </ul>	Writing reflections for desirable future		+
	<ul style="list-style-type: none"> <li>• Devising a generalised framework for offering to others based on key learnings</li> </ul>			+

**Scope and importance of the study**

Systematic learning from prior experience can increase the predictability and thereby preventability of conflicts. Building framework is important for current CFR management programs and it has

applications. Mainly, crucial conflicts related to open access commons needs a clear understanding. That's why I am focusing on this work by undertaking detailed documentation. This is a vital baseline exercise for policy making. Such an exercise can help in understanding, preventing and resolving potential conflicts making future CFR implementation smooth. Understanding conflicts is extremely important to gauge progress of community-based resource management and how the community learns to resolve and prevent conflicts will be a good indicator of sustainability of this model. My objective is to use this learning to understand the adaptive management steps in other CFR areas (Nayak 2001) and assess their efficacy on a longer time scale. This will help in designing a framework for assessing and developing predictive capacity of CFR management efforts elsewhere and across India.

This work has important role in initiating the process for determination. Even sub-topics like verification, monitoring, map preparation, resolutions reflect on conservation and management of CFR areas can also have indirect benefits due to this exercise.

Systematic guidelines and operating procedures for post claim management will definitely prove beneficial for other upcoming CFRs. A report by Azim Premji university team on 'Initiative for effective Implementation of FRA (forest rights act)' specifically summarizes few challenges. As per the report there is need to create platform to facilitate collective action that will address the perturbation that is closely interwoven with socio-economic environment.

This project can suggest a way of overcoming certain hurdles, creating awareness and information related to conflict management. It can be a useful tool for empowering community institution of tribals. Strengthening meaningful organisational effort which requires technical knowledge and framework support.

**Anticipated broad level results expected:**

Framework building for new theoretical insight.

Provide the tool with enough information on causes, actors, dynamics and the context to assess the relevance of the activity to the needs of the peacebuilding process (OECD (2012)).

Offer a strong research base to help evaluate the effectiveness and impacts of the program leading to policy.

**Budget requirements: for the project for 1 year**

<i>Components</i>	<i>Details of budget heads</i>	<i>Proposed approximate expenditure (in Rupees) For 12 Months</i>	<i>Explanation</i>
Investigators coordination at field and local level	<b>Field researchers @ 35,000 for 12 Months</b>	4,20,000	Field studies, interviews, data collection documentation and field coordination
Travel and logistics	Approximately per month @ Rs. 20,000/-	2,40,000	Travel to and in the field area and elsewhere
Information and development	Consumables	2,00,000	<ul style="list-style-type: none"> <li>● Expenses for holding meetings with stakeholders</li> <li>● Photocopying, stationary, reference books</li> <li>● Internet, linkages software and other overheads</li> <li>● Documentation and systematic compilation of the data</li> </ul>
Report preparation and dissemination	The learnings will be shared with the stakeholder communities	75,000	Final synthesis with respect to common factors and principles. printing and sharing the report
Overhead and admin		55,000	5% of the total budget
	<b>Total project cost including administration</b>	<b>9,90,000</b>	

Total project budget – Rupees Nine Lakh ninety thousand only.